ENVIRONMENTAL ASSESSMENT FOR RENOVATION OF BUILDING 442

United States Air Force

1st Fighter Wing

April 2003

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ACRONYMS AND ABBREVIATIONS

1 FW	1st Fighter Wing
ACC	Air Combat Command
ACM	asbestos-containing material
AFB	Air Force Base
AFI	Air Force Instruction
Air Force	United States Air Force
AQCR	Air Quality Control Region
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CO	carbon monoxide
CZMA	Coastal Zone Management Act
dB	decibel
dBA	A-weighted decibel
DNL	Day-Night Average Sound Level
DoD	Department of Defense
EA	environmental assessment
EIAP	environmental impact analysis process
EO	Executive Order
EPCRA	Emergency Planning and Community Right-to-Know Act
ERP	Environmental Restoration Program
ESA	Endangered Species Act
FY	Fiscal Year
I-64	Interstate 64
IG	Inspector General Office
MSL	mean sea level
NAAQS	National Ambient Air Quality Standards
NASA	National Aeronautics and Space Administration
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NO_2	nitrogen dioxide
NO_x	nitrogen oxide
NRHP	National Register of Historic Places
O_3	ozone
OSHA	Occupational Safety and Health Administration
Pb	lead
P.L.	Public Law
$PM_{2.5}$	particulate matter equal to or less than 2.5 micrometers in diameter
PM_{10}	particulate matter equal to or less than 10 micrometers in diameter
RCRA	Resource Conservation and Recovery Act
RMA	Resource Management Area
ROI	region of influence
RPA	Resource Protection Area
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SO_2	sulfur dioxide
SR	State Route
U.S.	United States
USACE	United States Army Corps of Engineers
USC	United States Code
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
UST	underground storage tank
VDEQ	Virginia Department of Environmental Quality
VDHR	Virginia Department of Historic Resources
VOC	volatile organic compound
VPDES	Virginia Pollutant Discharge Elimination System
XP	Plans Office

FINDING OF NO SIGNIFICANT IMPACT/
FINDING OF NO PRACTICABLE ALTERNATIVE

NAME OF THE PROPOSED ACTION

Renovation of Building 442

DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

The proposed action is to renovate Building 442 and centralize the 1st Fighter Wing (1 FW) Inspector General (IG) and 1 FW Plans (XP) offices in one location. Alternative One would be to relocate the 1 FW IG and 1 FW XP offices to an existing office building off base in the Hampton Roads area. A no-action alternative would be for the proposed renovation not to occur, and the 1 FW IG and 1 FW XP offices would remain at their current locations.

SUMMARY OF ENVIRONMENTAL CONSEQUENCES

This EA is an analysis of the potential environmental consequences associated with the proposed action, Alternative One, and the no-action alternative. Nine resource categories received thorough evaluation to identify potential environmental consequences. As indicated in Chapter 4.0 of the Environmental Assessment, none of the alternatives would result in significant impacts to any resource area. However, Alternative One and the no-action alternative would not accomplish the renovation of Building 442 in compliance with the Memorandum of Agreement with the Virginia State Historic Preservation Office (SHPO).

The proposed action and alternative would be consistent with surrounding land uses and would be in accordance with the Enforceable Regulatory Programs of the Virginia Coastal Resources Management Program to the maximum extent practicable.

Under the proposed action, vehicular circulation would remain good. The parking lot would provide ample space for users of Building 442. Truck traffic associated with the construction would be directed through the West Gate. Although truck traffic may lead to some degradation of these road surfaces and occasional congestion at the West Gate, these adverse effects would be short-term and not significant. Under Alternative One, impacts to transportation are not anticipated; however, vehicular circulation on base would be reduced slightly. IG and XP personnel would be required to travel to and from off-base office space.

Renovation of Building 442 with a consistent architectural design would benefit the visual resources of the base and the Langley Field Historic District and have no negative effects to the existing visual and natural character of the base. Under Alternative One, impacts to visual resources could occur as Building 442 would not be restored to its original character within the Historic District. Rehabilitation and adaptive reuse of Building 442, a contributing part of the Langley Field Historic District, are expected to provide beneficial effects to the property including demolition of a non-historic addition to the front of the building and restoration of the

front facade to a condition representative of its original appearance. Rehabilitation would be completed in compliance with section 3b of the 2001 F-22 Beddown Memorandum of Agreement between Langley AFB and the Virginia SHPO. Impacts to archaeological resources are not expected. Building 442 is located in a disturbed area with low archaeological potential. Impacts to traditional resources are not likely under the proposed action as no traditional resources have been identified at Langley AFB. Under Alternative One and the no-action alternative, impacts to architectural resources could occur. Not renovating Building 442 would result in non-compliance with section 3b of the 2001 F-22 Beddown Memorandum of Agreement between Langley AFB and the Virginia SHPO for mitigation of effects associated with the F-22 Beddown.

Under the proposed action, the overall ecological effect would be insignificant. Construction would disturb an area that was previously developed or landscaped. There would be no impacts to wetlands, and the proposed action would not conflict with the wetlands management program associated with the Virginia Coastal Zone Management Program. No special species or sensitive habitats will be impacted. Standard construction practices would be applied to control sedimentation and erosion during construction, thereby avoiding secondary effects to any wetlands or freshwater aquatic communities.

Construction is not expected to significantly affect the water quality of the Back River and Chesapeake Bay. Filtration would control storm water runoff and soil erosion from the site, and silt fences, storm drain inlet and outlet protection, and other appropriate standard construction practices would be employed. There would be no impacts to water resources from point sources or non-point sources.

Demolition and renovation of Building 442 may require the use of hazardous materials by contractor personnel. The base would maintain any hazardous materials used by base personnel in the operation of the building and no adverse environmental consequences are anticipated. Project contractors would comply with federal, state, and local environmental laws. Appreciable amounts of hazardous wastes are not likely to be generated by base personnel at this facility, and no adverse environmental consequences are expected.

Prior to any demolition activities associated with the proposed action, Building 442 would be reinspected to identify all asbestos, including Category I and Category II non-friable asbestos-containing material (ACM), and lead-containing materials. All waste ACM and lead-containing materials would be transported and disposed of in accordance with applicable federal and state regulations. If the contractor encounters underground storage tanks (UST) remaining from the old service station during the demolition, the contractor would work with the 1 FW Civil Engineering to ascertain the status of the USTs and determine if there are any structural integrity concerns in operating construction equipment over the old USTs.

Implementation of the proposed action would have minor, temporary increases in localized noise levels in the vicinity of the project area during construction. Noise would be similar to typical construction noise, last only the duration of the specific construction activities, and could

be reduced by the use of equipment sound mufflers and restricting construction activity to normal working hours. Noise from truck traffic hauling construction materials to the site would not affect base residents because the West Gate would provide construction access. The noise disruptions would be temporary and would be limited to daytime hours; therefore, impacts are considered insignificant.

Construction-related air emissions from the implementation of the proposed action would be generated on base but are expected to be less than one percent of emissions in the Hampton Air Quality Control Region. Under Alternative One, no construction would occur; however a slight increase in motor vehicle emissions could occur. Langley AFB is located in a maintenance area for ozone; however, the proposed action and the alternative would not contribute ozone-related emissions above United States Environmental Protection Agency (USEPA)-established *de minimis* levels for ozone. Therefore, a formal air quality conformity determination is not required.

CONCLUSION

Based on the findings of the EA, no significant impact is anticipated from implementation of either the proposed action or Alternative One. Therefore, issuance of a Finding of No Significant Impact (FONSI) is warranted, and an environmental impact statement (EIS) is not required. Pursuant to Executive Order (EO) 11988 and EO 11990, the authority delegated in Secretary of the Air Force Order (SAFO) 791.1, and taking the above information into account, I find that there is no practicable alternative to this action and that the proposed action includes all practicable measures to minimize harm to floodplain environments.

Bruce A Wright

BRUCE A. WRIGHT
Lieutenant General, USAF
Vice Commander, Air Combat Command

28 MAY 03

DATE

ENVIRONMENTAL ASSESSMENT FOR RENOVATION OF BUILDING 442

United States Air Force

1st Fighter Wing

April 2003

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FIGURES

TABLES

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EXECUTIVE SUMMARY

This Environmental Assessment (EA) describes the potential environmental consequences resulting from a proposal to renovate Building 442 at Langley Air Force Base (AFB), Virginia.

ENVIRONMENTAL IMPACT ANALYSIS PROCESS

This EA has been prepared by the United States Air Force (Air Force), Air Combat Command (ACC) and the 1st Fighter Wing (1 FW) in accordance with the requirements of the National Environmental Policy Act (NEPA) of 1969, the Council on Environmental Quality (CEQ) regulations implementing NEPA, and Air Force Instruction (AFI) 32-7061 (*The Environmental Impact Analysis Process,* 32 Code of Federal Regulations [CFR] 989).

PURPOSE AND NEED FOR ACTION

The purpose of this action is to enable the 1 FW Inspector General (IG) and 1 FW Plans (XP) offices to be centralized in one location, Building 442, and to comply with section 3b of the 2001 F-22 Beddown Memorandum of Agreement between Langley AFB and the Virginia State Historic Preservation Office (SHPO) for the mitigation of effects associated with the F-22 beddown.

The current locations for the 1 FW IG and 1 FW XP offices are Buildings 15 and 764. The IG is projected to leave Building 15 to allow for the further consolidation of Family Services in that facility. XP would vacate 1 FW Headquarters (Building 764) in order to allow other Wing functions to consolidate. Both of these staff agencies require new locations to replace their current office space.

PROPOSED ACTION AND ALTERNATIVES

Langley AFB proposes to centralize the 1 FW IG and 1 FW XP offices in one location (Building 442), and to renovate the building to accommodate these offices. Exterior renovation would include demolition of a non-historic addition to the front of the building; removal of a concrete pad and transformer unit to the rear of the building; restoration of the front facade to a condition representative of its original appearance; installation of windows replicating the original garage bay doors; and roof repair, including reinstallation of the original slate roof. An addition to the rear of the structure would include a conference room, mechanical room, electrical/communication room, and storage room. Interior renovation would result in a lobby, office spaces, a break room, restrooms, tool shed, and secure vault.

Alternative One would consist of relocation of the 1 FW IG and 1 FW XP offices to an existing office building off base in the Hampton Roads area.

Under the no action alternative, the proposed renovation would not occur. The 1 FW IG and 1 FW XP offices would remain at their current locations.

SUMMARY OF ENVIRONMENTAL CONSEQUENCES

This EA provides an analysis of the potential environmental consequences associated with the proposed action, Alternative One, and the no action alternative. Nine resource categories received thorough evaluation to identify potential environmental consequences. As indicated in Chapter 4.0, none of the alternatives would result in significant impacts to any resource area, however Alternative One and the no action alternative would not accomplish the renovation of Building 442 in compliance with the Memorandum of Agreement with the Virginia SHPO.

The proposed action and alternative would be consistent with surrounding land uses and would be in accordance with the Enforceable Regulatory Programs of the Virginia Coastal Resources Management Program to the maximum extent practicable.

Under the proposed action, vehicular circulation would remain good. The existing parking lot would provide ample space for users of Building 442. Truck traffic associated with the construction would be directed through the West Gate. Although truck traffic may lead to some degradation of these road surfaces and occasional congestion at the West Gate, these adverse effects would be short-term and not significant. Under Alternative One, impacts to transportation are not anticipated, however vehicular circulation on base would be reduced slightly. IG and XP personnel would be required to travel to and from off base office space.

Renovation of Building 442, with a consistent architectural design, would benefit the visual resources of the base and the Langley Field Historic District with no negative effect to the existing visual and natural character of the base. Under Alternative One, negative impacts to visual resources could occur, as Building 442 would not be restored to its original character within the Historic District.

Rehabilitation and adaptive reuse of Building 442, a contributing element of the Langley Field Historic District, are expected to provide beneficial effects on the property, including demolition of a non-historic addition to the front of the building and restoration of the front facade to a condition representative of its original appearance. Rehabilitation would be completed in compliance with section 3b of the 2001 F-22 Beddown Memorandum of Agreement between Langley AFB and the Virginia SHPO. Impacts to archaeological resources are not expected. Building 442 is located in a disturbed area with low archaeological potential. Impacts to traditional resources are not likely under the proposed action. No traditional resources have been identified at Langley AFB.

Under Alternative One and the no action alternative, impacts to architectural resources could occur. Not renovating Building 442 would result in non-compliance with section 3b of the 2001 F-22 Beddown Memorandum of Agreement between Langley AFB and the Virginia SHPO for mitigation of effects associated with the F-22 Beddown.

Under the proposed action, the overall ecological effect would be insignificant. Construction would disturb an area that is previously developed or landscaped. There would be no impacts to wetlands and the proposed action would not conflict with the wetlands management program associated with the Virginia Coastal Zone Management Program. No special species or sensitive habitats are expected to be impacted. Standard construction practices would be

applied to control sedimentation and erosion during construction, thereby avoiding secondary effects to any wetlands or freshwater aquatic communities.

Construction is not expected to significantly affect the water quality of the Back River and Chesapeake Bay. Filtration would control storm water runoff and soil erosion from the site and silt fences, storm drain inlet and outlet protection, and other appropriate standard construction practices would be employed. There would be no impacts to water resources from point sources or non-point sources.

Demolition and renovation of Building 442 may require the use of hazardous materials by contractor personnel. The base would maintain any hazardous materials used by base personnel in the operation of the building and no adverse environmental consequences are anticipated. Project contractors would comply with federal, state, and local environmental laws. Appreciable amounts of hazardous wastes are not likely to be generated by base personnel at this facility and no adverse environmental consequences are expected.

Prior to any demolition activities associated with the proposed action, Building 442 would be re-inspected to identify all asbestos, including Category I and Category II non-friable asbestos-containing material (ACM) and lead-containing materials. All waste ACM and lead-containing materials would be transported and disposed of in accordance with applicable federal and state regulations. If the contractor encounters underground storage tanks (USTs) remaining from the old service station during the demolition, the contractor would work with the Langley's Civil Engineering to ascertain the status of the USTs and determine if there is any structural integrity concerns operating construction equipment over the old USTs. If necessary, the USTs may require closure in accordance with Virginia UST regulations.

Implementation of the proposed action would have minor, temporary increases in localized noise levels in the vicinity of the project area during construction. Noise would be similar to typical construction noise, last only the duration of the specific construction activities, and could be reduced by the use of equipment sound mufflers and restricting construction activity to normal working hours. Noise from truck traffic hauling construction materials to the site would not affect base residents because the West Gate would provide construction access. The noise disruptions would be temporary and would be limited to daytime hours; therefore, impacts are considered insignificant.

Construction-related air emissions from the implementation of the proposed action would be generated on base but are expected to be less than one percent of emissions in the Hampton Air Quality Control Region (AQCR). Under Alternative One, no construction would occur, however a slight increase in motor vehicle emissions could occur. Langley AFB is located in a maintenance area for ozone; however, the proposed action and the alternative would not contribute ozone-related emissions above United States Environmental Protection Agency (USEPA) established *de minimis* levels for ozone. Therefore, a formal air quality conformity determination is not required.

SUMMARY OF IMPACTS

Table ES-1 summarizes the potential environmental impacts of the proposed action and alternatives, based on the detailed impact analysis presented in Chapter 4.0. In no instance would the potential impacts be significant with implementation of the proposed action or alternatives.

Table ES-1. Summary of Potential Environmental Impacts of Proposed Action and Alternatives

Resource	*Proposed Action*	*Alternative One*	*No Action Alternative*
Land Use	0	0	0
Transportation	-	0	0
Visual	+	-	-
Cultural Resources	+	-	-
Biological Resources	0	0	0
Water Resources	0	0	0
Hazardous Materials and Waste Management	-	0	0
Noise	0	0	0
Air Quality	0	0	0

- = Adverse, but not significant impact
+ = Positive/beneficial impact
0 = No change

1.0 PURPOSE AND NEED FOR ACTION

1.1 INTRODUCTION

The United States Air Force (Air Force), 1st Fighter Wing (1 FW) proposes to renovate Building 442 at Langley Air Force Base (AFB), Virginia. This environmental assessment (EA) has been prepared to analyze the potential environmental consequences associated with the proposed action and alternatives in accordance with the requirements of the National Environmental Policy Act (NEPA) (42 United States Code [USC] 4321 *et seq.*). This document was prepared in accordance with the following:

- Regulations established by the Council on Environmental Quality (CEQ) (40 Code of Federal Regulations [CFR] 1500-1508).
- Air Force Instruction (AFI) 32-7061 (*The Environmental Impact Analysis Process* [EIAP], as codified in 32 CFR 989).

This EA also provides an evaluation of potential coastal zone impacts pursuant to National Oceanic and Atmospheric Administration Coastal Zone Management regulations (15 CFR 930). Consequently, this EA serves as coastal consistency determination documentation with respect to implementation of the proposed action or alternatives.

Section 1.2 provides background information that briefly describes Langley AFB. The purpose and need for the proposed action are described in Section 1.3.

A detailed description of the proposed action, alternative, and the no action alternative is provided in Chapter 2.0. Chapter 3.0 describes the existing conditions of various environmental resources that could be affected if the proposal were implemented. Chapter 4.0 describes how those resources would be affected by implementation of the proposed action and alternative, or the no action alternative. Chapter 5.0 addresses the cumulative effects of the proposed action, as well as other recent past, current, and future actions that may be implemented in the region of influence (ROI) for the proposed action.

1.2 BACKGROUND

Langley AFB is located approximately 175 miles south of Washington, D.C., near the south end of the lower Virginia Peninsula on the Back River, a tributary of the Chesapeake Bay. Langley AFB is situated in the Hampton Roads Standard Metropolitan Statistical Area, in the City of Hampton, Virginia. Other cities in the area include Newport News, Poquoson, Norfolk, and Portsmouth. As shown in Figure 1-1, the main base occupies 2,883 acres between the Northwest and Southwest Branches of the Back River.

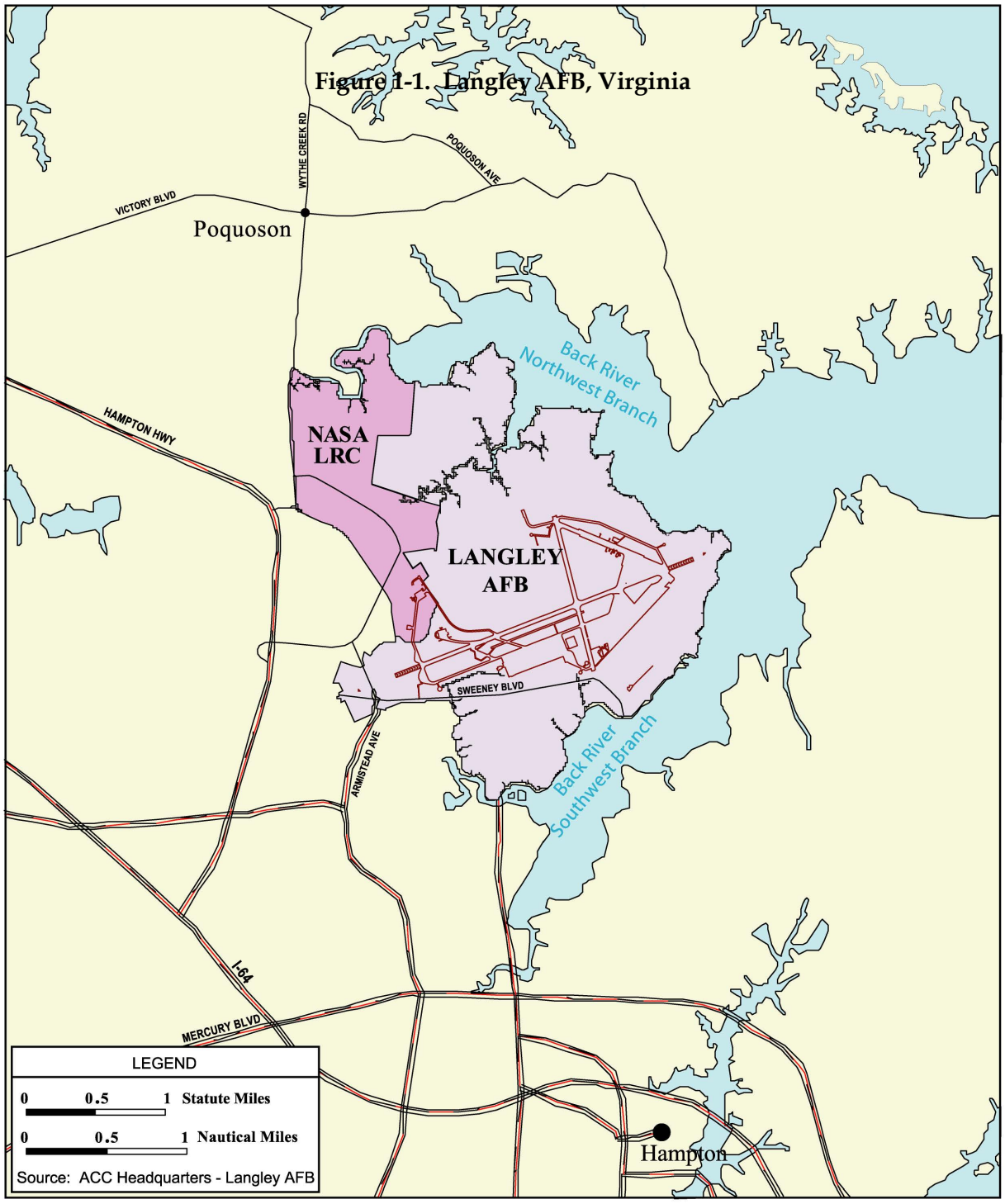
Figure 1-1. Langley AFB, Virginia
WYTHE CREEK RD
POQUOSON AVE
VICTORY BLVD
Poquoson
Back River
Northwest Branch
HAMPTON HWY
NASA
LRC
LANGLEY
AFB
SWEENEY BLVD
ARMISTEAD AVE
Back River
Southwest Branch
I-64
MERCURY BLVD
LEGEND
0 0.5 1 Statute Miles
0 0.5 1 Nautical Miles
Source: ACC Headquarters - Langley AFB
Hampton
VIRGINIA
Richmond
Langley AFB
Figure 1-1
Langley AFB, Virginia

Langley AFB is headquarters for Air Combat Command (ACC) and home of the 1 FW. ACC is one of eight major commands in the Air Force and is responsible for organizing, equipping, training, and maintaining combat-ready forces at the highest level of readiness. The primary mission of Langley AFB is to provide air operational support to a broad spectrum of aircraft in both peacetime and combat environments. General goals of the base are to sustain the resources and relationships deemed appropriate to pursue national interests, and provide for the command, control, and communications necessary to execute the missions of the Air Force, ACC, and the 1 FW.

1.3 PURPOSE AND NEED

The purpose of this action is to enable the 1 FW Inspector General (IG) and 1 FW Plans (XP) offices to be centralized in one location, Building 442, and to comply with section 3b of the 2001 F-22 Beddown Memorandum of Agreement between Langley AFB and the Virginia State Historic Preservation Office (SHPO) for the mitigation of effects associated with the F-22 beddown. The current locations for these IG and XP offices (depicted on Figure 1-2) are Buildings 15 and 764 respectively. IG is projected to leave Building 15 to allow for the further consolidation of Family Services in that facility, while XP would vacate 1 FW Headquarters (Building 764) in order to allow other Wing functions to consolidate. Both of these staff agencies require new locations to replace their current office space.

Several years ago, Building 442 was considered as a possible location for a visitor's center, however the current need for additional office space has required renovation and reuse of this building for office space. The decision to construct a visitor's center has been suspended at this time (personal communication, Allan 2003). This proposed building renovation and reuse is consistent with the mitigation requirement set forth in the aforementioned Memorandum of Agreement.

Front of Building 442. View from intersection of Hammond and Mabry Avenues.

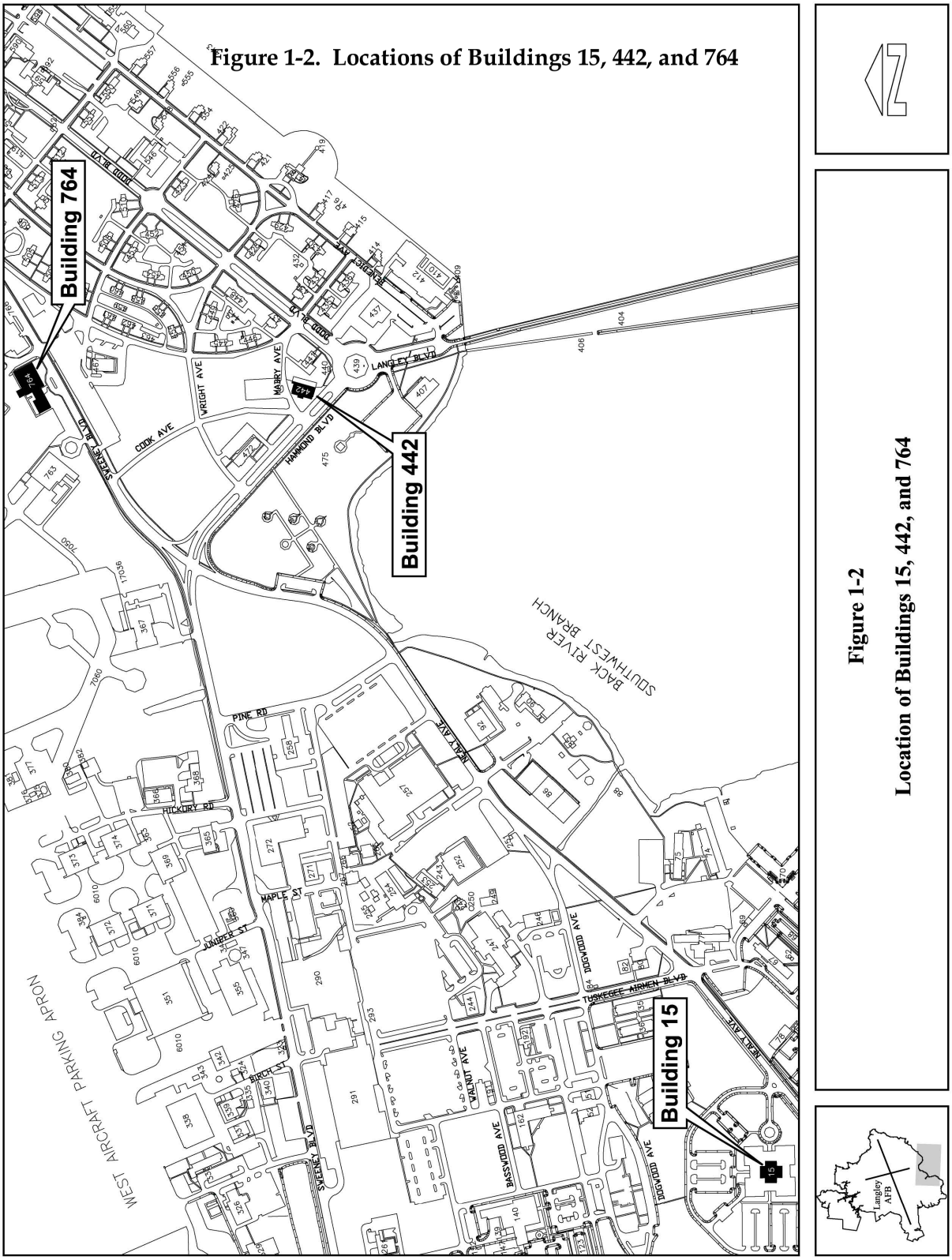

Figure 1-2. Locations of Buildings 15, 442, and 764

Figure 1-2
Location of Buildings 15, 442, and 764

2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

Langley AFB proposes to renovate Building 442 at Langley AFB, Virginia. This EA evaluates the proposed action, alternative, and the no action alternative.

2.1 PROPOSED ACTION

As depicted on Figure 2-1, Building 442 is located at the corner of Hammond and Mabry Avenues in the southern portion of Langley AFB. It is located within the Langley Field Historic District, and features the Tudor Revival style of other structures in the District.

Constructed in 1940, the building was the first Base Service Station. In 1965, it was remodeled to serve as an Army and Air Force Exchange Service convenience store and continued as that use until 1997. At that time it was closed and left vacant due to the lack of suitable adaptive reuse and the need to relocate the convenience store to a larger facility that allowed consolidation with the class VI retail function.

Located across from the Air Power Pavilion, Building 442 is located on the same triangular block with the Red Cross building (Building 441) and a small bus shelter (Building 440). Building 442 is linked by existing sidewalks along Hammond Avenue to Lawson Hall (Building 472), a distinguished visitors quarters. A paved area of exposed aggregate concrete occurs in front of Building 442 and a 24-foot wide concrete pad extends across the rear elevation.

Mabry Avenue is one way eastbound and provides access to the parking lot. Approximately 60 angled parking spaces are located in the parking lot to the north, off Mabry Avenue.

Building 442 is a brick single story structure with a slate roof and original dormer windows. A notable building feature is a main gable centered over the entrance featuring a half-timber Tudor motif constructed of plaster and wood.

The proposed action includes demolition of a 105-foot x 30-foot non-historic addition on the front of the building, as well as removal of a concrete pad and transformer unit to the rear. The front facade would then be restored to a condition representative of its original appearance. Windows replicating the original garage bay doors would be installed. The roof would be repaired and the original slate roof would be reinstalled.

The interior renovation would result in a lobby, office spaces, a break room, restrooms, tool shed, and secure vault. An addition to the rear of the structure (approximately 50 feet x 20 feet) would include a conference room, mechanical room, electrical/communication room, and storage room. The addition would be brick to match the historic material and roofed with a synthetic slate.

Figure 2-2 illustrates the proposed renovation footprint. Utilities required for this project include electrical, plumbing, mechanical, communications, and fire protection.

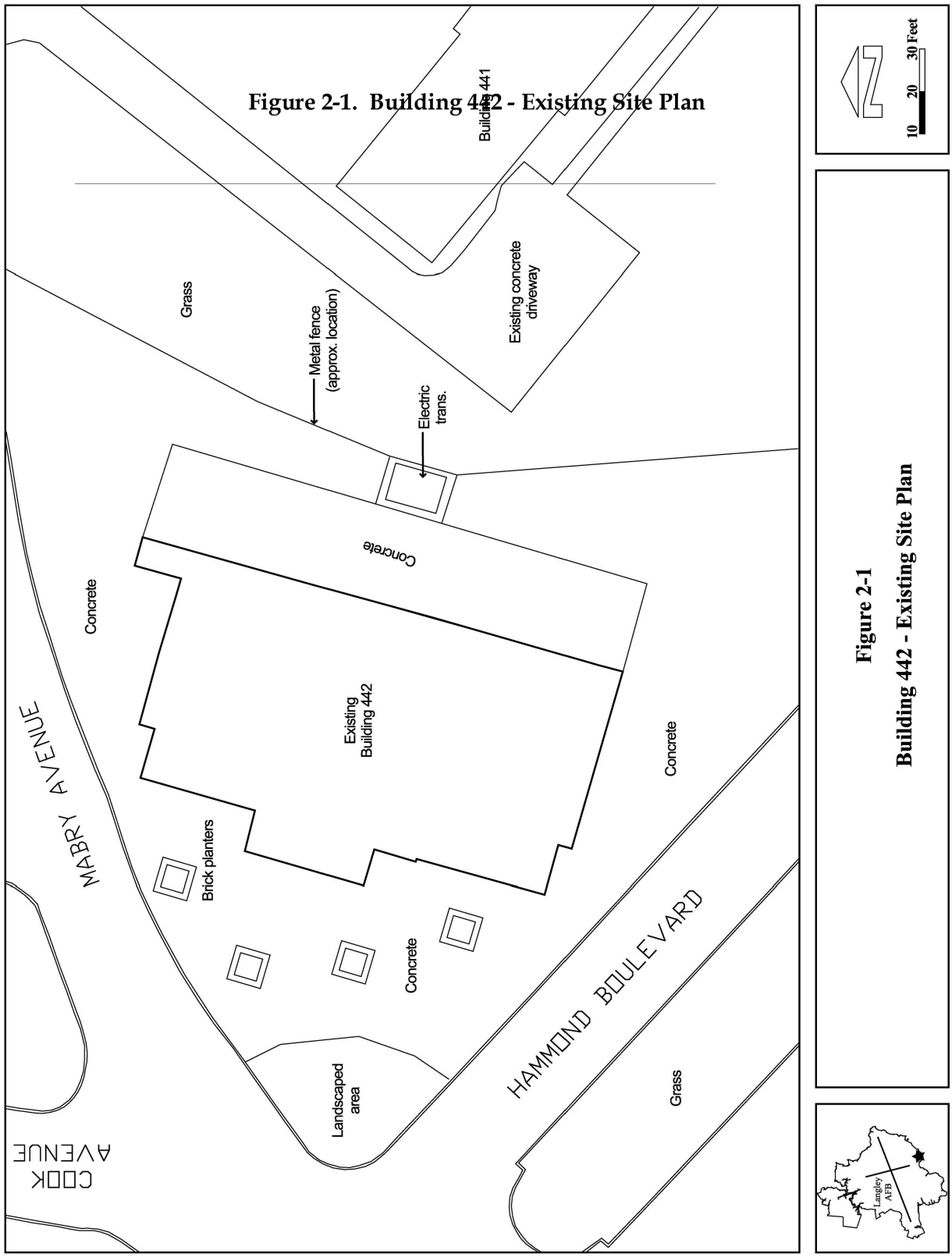

Figure 2-1. Building 442 - Existing Site Plan

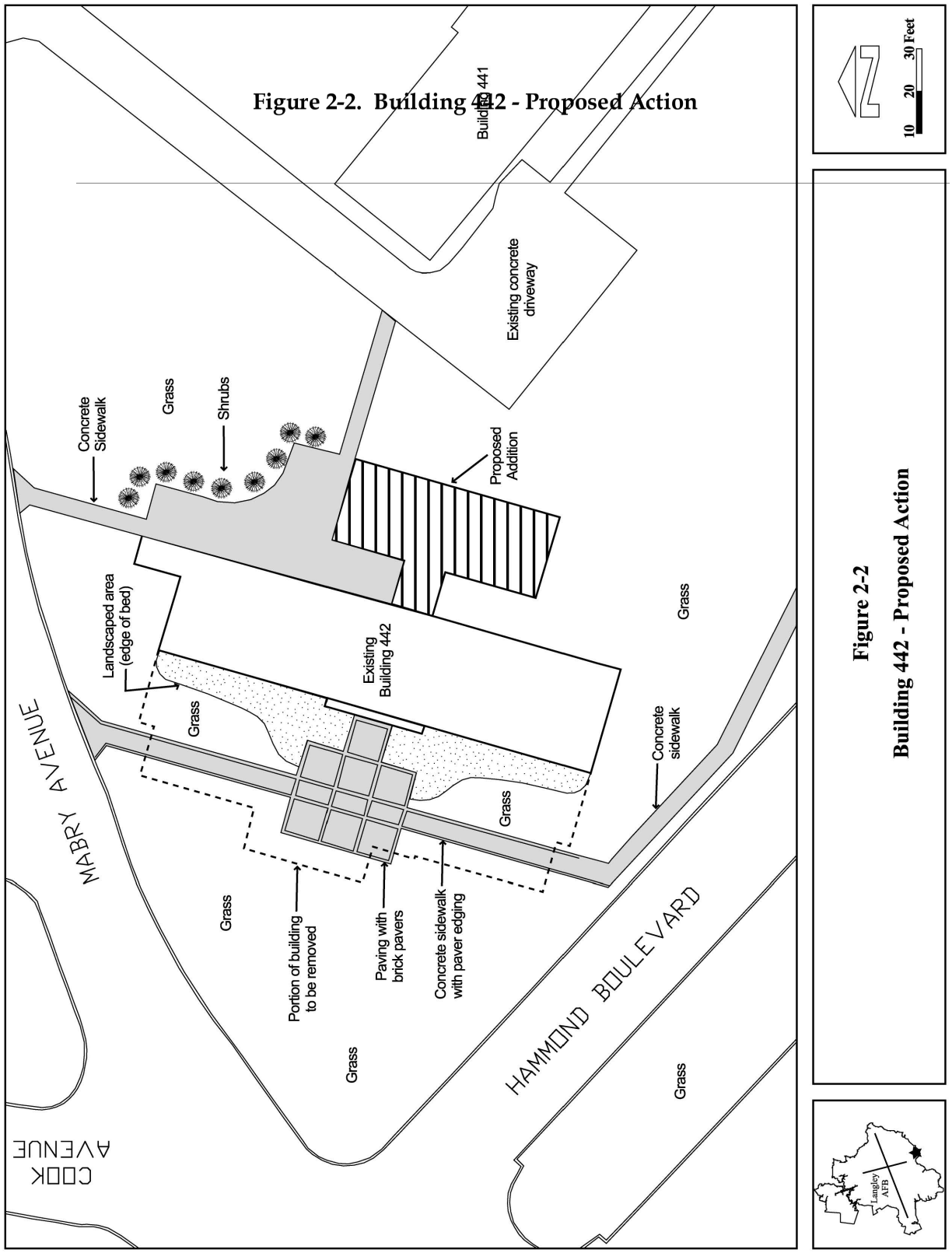

Figure 2-2. Building 442 - Proposed Action

2.2 ALTERNATIVE ONE

Under Alternative One, the proposed renovation would not occur. The 1 FW IG and 1 FW XP offices would be relocated to an existing office building in the Hampton Roads area. This would enable the projected relocations and organizational changes to occur at Buildings 15 and 764, by providing off base office space for the 1 FW IG and XP staff agencies.

2.3 NO ACTION ALTERNATIVE

Under the no action alternative, the proposed renovation would not occur. The 1 FW IG and 1 FW XP offices would remain in their current locations, Buildings 15 and 764 respectively. However, these squadrons are projected to leave these facilities and without this renovation of Building 442, the 1 FW IG and XP staff agencies will not have a facility to accomplish their respective missions.

2.4 ENVIRONMENTAL IMPACT ANALYSIS PROCESS

The EIAP includes the review of all information pertinent to the proposed action and reasonable alternatives and provides a full and fair discussion of potential consequences to the natural and human environment. The process includes involvement with the public and agencies to identify possible consequences of an action, as well as the focusing of analysis on environmental resources potentially affected by the proposed action or alternatives.

2.4.1 Public and Agency Involvement

Due to the minor nature of this action, the public and agency involvement in this environmental analysis process was tailored to potentially affected groups. Consultation with the Virginia Department of Historic Resources (VDHR) regarding the renovation of Building 442, including submittal of 90 percent design drawings, was initiated by the Air Force in January 2003 (refer to Appendix A). In February 2003, the Air Force also contacted the U.S. Fish and Wildlife Service (USFWS) to inform them of the Air Force availability of the Draft EA for the renovation of Building 442 at Langley AFB (refer to Appendix A).

To facilitate public involvement in this project, the Air Force prepared and published newspaper advertisements announcing the availability of the Draft EA for public and agency review. The Draft EA is also distributed to the base and other local libraries.

2.4.2 Regulatory Compliance

This EA has been prepared to satisfy the requirements of NEPA (Public Law [P.L.] 91-190, 42 USC 4321 et seq.) as amended in 1975 by P.L. 94-52 and P.L. 94-83. The intent of NEPA is to protect, restore, and enhance the environment through well-informed federal decisions. In addition, this document was prepared in accordance with AFI 32-7061, which implements Section 102 (2) of NEPA and regulations established by the CEQ (40 CFR 1500-1508; 32 CFR Part 989).

The Draft EA is sent to the Virginia Department of Environmental Quality (VDEQ). Compliance with the Endangered Species Act (ESA) involves communication with the Department of the Interior (delegated to the USFWS) in cases where a federal action could affect

the listed threatened or endangered species, species proposed for listing, or species that could be candidates for listing. As stated above, a letter was sent to the USFWS, informing them of the proposed action. Since no adverse effects are anticipated, further consultation is not required. The preservation of cultural resources falls under the purview of the SHPO, as mandated by the National Historic Preservation Act (NHPA) and its implementing regulations. As described in section 2.4.1, a letter was sent to the SHPO informing them of the proposed action. Appendix A includes copies of relevant coordination letters.

2.4.3 Permit Requirements

This EA has been prepared in compliance with NEPA; other federal statutes, such as the Clean Air Act (CAA) and the Clean Water Act; Executive Orders (EOs), and applicable state statutes and regulations. Table 2-1 summarizes applicable federal, state, and local permits and the potential for change to the permits due to the proposed action or alternatives.

South Side of Building 442. View from Hammond Avenue.

Table 2-1. Environmental Related Permitting

Type of Permit or Regulatory Requirement	*Requirement*	*Agency*
Endangered Species Act	Required to consult on impacts of project implementation on federally listed or proposed threatened and endangered species	U.S. Fish and Wildlife Service
National Historic Preservation Act Section 106	Consultation with State Historic Preservation Office	Commonwealth of Virginia, Department of Historic Resources
Coastal Consistency Determination	Determine consistency with enforceable policies of Commonwealth's Coastal Zone Management Program	Commonwealth of Virginia, Department of Environmental Quality

In addition to this EA being prepared for the decision maker and the interested public, it is also a tool for Air Force personnel to ensure compliance with all regulatory requirements from proposal through project implementation.

2.5 COMPARISON OF ALTERNATIVES

Table 2-2 summarizes the potential environmental impacts of the proposed action and alternatives, based on the impact analyses presented in Chapter 4.0. In no instance would the potential environmental consequences be significant with the implementation of the proposed action or alternatives.

Rear of Building 442. View from Dodd Boulevard.

Table 2-2. Summary of Potential Environmental Impacts of Proposed Action and Alternatives

Resource	*Proposed Action*	*Alternative One*	*No Action Alternative*
Land Use	0	0	0
Transportation	-	0	0
Visual	+	-	-
Cultural Resources	+	-	-
Biological Resources	0	0	0
Water Resources	0	0	0
Hazardous Materials and Waste Management	-	0	0
Noise	0	0	0
Air Quality	0	0	0

- = Adverse, but not significant impact
+ = Positive/beneficial impact
0 = No change

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3.0 AFFECTED ENVIRONMENT

This chapter describes relevant existing environmental conditions at Langley AFB for resources potentially affected by the proposed action, alternative, and no action alternative described in Chapter 2.0. In compliance with guidelines contained in the NEPA, CEQ regulations, and AFI 32-7061, the description of the existing environment focuses on those environmental resources potentially subject to impacts. These resources and conditions are: land use, including visual and transportation; cultural resources; physical resources, including water and biological resources; hazardous materials and waste; noise, and air quality. The expected geographic scope of potential impacts, known as the region of influence (ROI), is defined for each resource analyzed.

RESOURCES ELIMINATED FROM DETAILED CONSIDERATION

Several resources were not evaluated in this EA because it was determined that implementation of the proposed action is unlikely to affect them. These resources include airspace, safety, earth resources, recreation, socioeconomics and environmental justice. A brief explanation of the reasons why each resource has been eliminated from further consideration in this EA is provided below.

Airspace. The proposed action and alternatives do not involve aircraft or airspace modifications.

Safety. This resource typically considers safety associated with aircraft use. Construction related safety procedures are anticipated to be in place for the demolition, construction, and renovation activity.

Earth Resources. Since the renovation involves an existing structure and a previously developed lot, no impacts to earth resources (e.g., soils, paleontological resources) would occur as a result of the proposed action. The physical resources section addresses erosion concerns.

Recreation. With the implementation of this proposed action, no change in personnel would occur and no expansion of the facility would occur affecting recreation.

Socioeconomics and Environmental Justice. Implementation of the proposed action does not include modifications to current manpower authorizations. Furthermore, the proposed action is sited on an existing developed site. Therefore, both of these resources were eliminated from further analysis.

3.1 LAND USE

The attributes of land use addressed in this analysis include land use, transportation, and visual resources. Land use focuses on general land use patterns, as well as management plans, policies, ordinances, and regulations. These provisions determine the types of uses that are allowable and identify appropriate design and development standards to address specially designated or environmentally sensitive areas. Transportation addresses roads and circulation. Visual resources present the natural and manufactured features that constitute the aesthetic qualities of an area. The ROI for land use resources consists of Langley AFB.

3.1.1 Land Use

Land uses on Langley AFB are grouped by function in distinct geographic areas. For example, aircraft operations and maintenance facilities are located in the southern portion of the base. The residential areas on base are located along the Back River in the southeastern and northeastern portions of the base. The proposed action site is located at the corner of Hammond and Mabry Avenues in the southern portion of Langley AFB. Building 442 is sited within the Langley Field Historic District near the Air Power Pavilion and Memorial Park.

Adopted plans and programs guide land use planning on Langley AFB. Base plans and studies present factors affecting both on- and off-base land use and include recommendations to assist on-base officials and local community leaders in ensuring compatible development. The *Langley 2020 AFB General Plan* provides an overall perspective concerning development opportunities and constraints. ACC Campus Plan provides guidance relative to the development and use of the proposed action site. The base's *Integrated Natural Resource Management Plan* (Air Force 1998a) is used to coordinate natural resource management.

The Coastal Zone Management Act (CZMA) was enacted to develop a national coastal management program that comprehensively manages and balances competing uses of and impacts to any coastal use or resource. The CZMA federal consistency requirement, CZMA section 307, mandates that federal agency activities be consistent to the maximum extent practicable with the enforceable policies of a state management program. The federal consistency requirement applies when any federal activity, regardless of location, affects any land or water use or natural resource of the coastal zone. The question of whether a specific federal agency activity may affect any natural resource, land use, or water use in the coastal zone is determined by the federal agency.

The VDEQ oversees activities in the coastal zone of the Commonwealth through a number of enforceable programs. In reviewing the proposed action, VDEQ may require agencies to coordinate with its specific divisions or other agencies for consultation or to obtain permits; they also may comment on environmental impacts and mitigation. VDEQ enforceable programs and policies pertain to fisheries management, subaqueous lands management, wetlands management, dunes management, non-point source pollution control, point source pollution control, shoreline sanitation, air pollution control, and coastal lands management. Not all of these enforceable programs are applicable to the proposed action, as explained in the following sub-sections.

Fisheries Management. The construction of this project would have no adverse effect on the conservation and enhancement of finfish and shellfish resources, or on the promotion of commercial and recreational fisheries.

Subaqueous Lands Management. The construction of this project would not involve encroachment into, on, or over, state-owned subaqueous lands.

Dunes Management. There are no sand-covered beaches or sand dunes in the vicinity of this project.

Shoreline Sanitation. This project would include interconnections to the base sanitary sewer system. No septic systems, regulated by this program, would be proposed.

Wetlands Management. This project would have no adverse effect on any identified wetlands present on Langley AFB.

Coastal Lands Management. This project would not be located within 100 feet of the Resource Management Areas (RMAs) or Resource Protection Areas (RPAs) as designated by the Chesapeake Bay Preservation Act.

3.1.2 Transportation

Access to Langley AFB is provided from Interstate 64 (I-64) via Armistead Avenue to the west of the base, and from Mercury Boulevard (United States [U.S.] Route 258/Virginia State Route [SR] 32), via LaSalle Avenue (SR 167) or King Street (SR 278). Langley AFB has a network of streets that provide access to all base facilities. Nealy Avenue begins at the Main Gate and continues northeast through the installation. Sweeney Boulevard is the primary east west corridor linking directly to the West Gate at Armistead Avenue. It has three lanes (center lane reversible) from the gate to the intersection with Nealy Avenue/Hammond Avenue. Parking in some on-base areas is limited. Building 442 is located at the intersection of Mabry Avenue and Hammond Avenue. Hammond Avenue is a four lane divided boulevard with a wide median. Mabry Avenue is one-way eastbound and provides access to the building 60 angle space parking lot.

3.1.3 Visual Resources

Langley AFB is located in the city of Hampton near the southern end of the lower Virginia Peninsula, between the Northwest and Southwest Branches of the Back River, a branch of the Chesapeake Bay. The base is in the Coastal Plain Physiographic province on Hampton Flat, a nearly flat plain that gently slopes toward the east, with elevations between 5 and 11 feet above mean sea level (MSL).

The main base occupies 2,883 acres of the total site. The largest structures on base are the aircraft operations and maintenance facilities located in the southern portion of the base. National Aeronautics and Space Administration (NASA) operates a facility complex in the northwestern, southern, and southeastern portion of the base. The large wind tunnels and aeronautical test equipment that comprise the NASA facility resemble a large industrial area. A number of older buildings on base, such as the Albert Kahn-designed hangars, give the base a character reflecting its history as an important airbase from the beginning of the aviation era. The proposed action is located within the Langley Field Historic District, and the building is readily visible from both directions on Hammond Avenue.

Much of the vegetation on base was planted at the time of the base's original construction (circa 1916-1930). Towering oak trees are the dominant species of trees in the Langley Field Historic District. They have been used mainly as street plantings and as decorative plantings around many buildings.

3.2 CULTURAL RESOURCES

Cultural resources are defined as any prehistoric or historic district, site, building, structure, or object considered important to a culture, subculture, or community for scientific, traditional, or religious reasons. They can be divided into three categories: archaeological; architectural/ engineering; and traditional.

Archaeological resources are locations where prehistoric or historic activity measurably altered the earth, or produced deposits of physical remains. Architectural/engineering resources include standing buildings, dams, canals, bridges, and other structures of historic significance. Architectural/engineering resources generally must be more than 50 years old to be considered for inclusion in the National Register of Historic Places (NRHP). However, more recent structures, such as Cold War era resources, may warrant protection if they manifest "exceptional significance" or the potential to gain significance in the future. Traditional resources are resources associated with cultural practices and beliefs of a living community that are rooted in its history and are important in maintaining the continuing cultural identity of the community.

The ROI for cultural resources is the area within which the proposed action has the potential to affect existing or potentially occurring archaeological, architectural, or traditional resources. For the proposed action and alternatives, the ROI is defined as Langley AFB.

3.2.1 Identified Cultural Resources

Thirteen archaeological sites and 258 historic architectural resources have been identified within Langley AFB. The Langley Field Historic District encompasses most of the eastern base (United States Army Corps of Engineers [USACE] 1998), including the subject project area. Building 442 is in an area of historic buildings reflecting use of the base from 1917 through the present. Nearby buildings include the Red Cross building (Building 441), built before 1945, and Lawson Hall (Building 472), a distinguished visitors quarters, constructed in 1917. Building 442, as well as the nearby 441 and 472, are all contributing members of the Langley Field Historic District (USACE 1998).

For 25 years, Building 442 served continuously as the original base service station. When originally constructed, it consisted of a central office area with two service bays on each side. In 1953, an additional service bay was constructed on each side of the central office. The building was converted into a shoppette in 1965. This conversion included several additions to the front of the original structure, and in 1966, construction of a large concrete patio along the back of the building (Air Force 1997). The shoppette relocated in 1997 to a larger facility and Building 442 has remained vacant since that time.

The present project area has no recorded archaeological sites and has a low potential for unidentified archaeological resources because of heavy development and use over the years (Wheaton et al. 1991). No traditional resources or Native American issues have been identified at Langley AFB (USACE 1998). No federally recognized Indian tribes or lands are located in Virginia.

3.3 PHYSICAL RESOURCES

3.3.1 Biological Resources

For purposes of the impact analysis, biological resources are divided into three major categories: (1) terrestrial communities, (2) wetland and freshwater aquatic communities, and (3) threatened, endangered, and special status species/communities. The ROI for biological resources includes Langley AFB and the specific areas associated with the proposed action and alternative one.

TERRESTRIAL COMMUNITIES

Only a relatively small portion of Langley AFB is forested or remains in its natural state. Plant communities include approximately 250 acres of mixed oak-hickory hardwood forests, 60 acres of 60-year-old planted loblolly pine forests, 450 acres of tidal salt marshes, and an undetermined amount of old-field successional areas. The remaining portions of the base consist of managed lawns and developed areas of buildings, structures, and pavement.

Wildlife on the base are widespread species that are habitat generalists or tolerant of disturbance. This includes a wide variety of game and furbearing species, small mammals, waterfowl, songbirds, raptors, amphibians, reptiles, and fish. The proximity of the base to estuarine and marine habitats of Chesapeake Bay provides habitat for a variety of neotropical migrants and waterfowl.

WETLAND AND FRESHWATER AQUATIC COMMUNITIES

Wetlands at Langley AFB encompass approximately 652 acres, 462 acres of which are non-freshwater estuarine wetlands. However, there are no wetlands within the area considered for the proposed action. A wetlands delineation of the entire base, conducted in late 2000 (Air Force 2001a), is under jurisdictional determination review by the Norfolk USACE (personal communication, Wittkamp 2003).

THREATENED, ENDANGERED, AND SPECIAL STATUS SPECIES/COMMUNITIES

Fourteen special status species occur, or have the potential to occur, on Langley AFB and are presented in Table 3-1. Eleven have special state status and three have additional federal status. No critical habitat occurs on base.

Langley AFB provides habitat for one federally listed threatened species: the bald eagle. Surveys conducted in 1993 and 1994 indicated that foraging by bald eagles occurs to a limited extent within creeks and marshes of the base. Habitat suitable for nesting or roosting occurs among the loblolly pines on the northern side of the base, but no nesting or long-term roosting has ever been observed. Uniform age/size structure of loblolly pine stands may limit use of the base as nesting or roosting habitat (Barrera 1995). The bald eagle has nested within 3 miles of the base in recent years. A nest was about 3 miles west of the base in 1997 and 1998. This nest has not been active since 1998 (personal communication, Wilcox 2001). An active bald eagle nest site is 3 miles directly east of the base. This nest has been active for the last two breeding

Table 3-1. Threatened, Endangered, and Special-Status Species/ Communities that Occur or Potentially Occur on Langley AFB

Species	*Status*	*Areas of Occurrence*
Plants		
Harper's fimbristylis *Fimbristylis perpusill*	SE	Coastal seasonal ponds.
Virginia least trillium *Trillium pusillum var. virginianum*	FSC	Forested wetlands and mesic woods including the "green sea" wetlands. Recorded from the City of Hampton.
Invertebrates		
Northeastern beach tiger beetle *Cicindela dorsalis dorsalis*	FT	Broad beaches with well-developed sand dunes.
Amphibians		
Barking treefrog *Hyla gratiosa*	ST	Breeds in coastal seasonal freshwater ponds. Needs fish-free breeding habitat. Base at northern edge of range. Spends warm months in treetops, seeks moisture during dry periods by burrowing among tree roots and clumps of vegetation.
Mabee's salamander *Ambystoma mabeei*	ST	Breeds in coastal seasonal freshwater ponds. Needs fish-free breeding habitat. Tupelo and cypress bottoms in pine woods, open fields, and lowland deciduous forest.
Reptiles		
Canebrake rattlesnake *Crotalus horridus atricaudatus*	SE	Meadows, canebrake or "green sea" wetlands. At risk because of wetland loss. Swampy areas, canebrake thickets, and floodplains.
Birds		
Bald eagle *Haliaeetus leucocephalus*	FT/SE	Forages occasionally on base. Nests within three miles of the base.
Foster's tern *Sterna forsteri*	SS	Coastal and marshland bird that fishes the waters of the region.
Glossy ibis *Plegadis falcinellus*	SS	Wades in marshes and fishes the waters of the region.
Great egret *Asmerodius albus*	SC	Palustrine and estuarine wetlands; marshes.
Night-heron yellow-crowned *Nyctanassa violacea violacea*	SS	Wades in marshes and fishes the waters of the region.
Northern harrier *Circus cyaneus*	SS	Hunts over marshes and fields and is known to nest in the area.
Least tern *Sterna antillarum*	SS	Found feeding or nesting on beaches in the area.
Peregrine falcon *Falco peregrinus*	SE	Observed foraging over salt marshes on base. Open wetlands near cliffs.
Piping plover *Charadrius melodius*	FT/ST	Prefers areas with expansive sand or mudflats (for foraging) in close proximity to a sand beach (for roosting). Fifty-two designated critical habitat units from North Carolina south to northern Florida along mainland beaches and barrier islands.

Notes: FSC = Federal Species of Concern; SE = State Endangered; FT = Federal Threatened; SS = State Sensitive; SC = State Candidate; ST = State Threatened

seasons (personal communication, Davis 2001). The second federally listed threatened species, the northeastern beach tiger beetle, has no record of occurrence on base; it typically inhabits broad sandy beaches and has become a species of concern within the Chesapeake Bay ecosystem. The third federally listed threatened species, the piping plover, is associated with sandy beaches, which are not found on Langley AFB. The Virginia least trillium, found in forested wetlands, is a federal species of concern. No forested wetlands are located near the area of consideration for the proposed action.

Virginia special status species include the barking treefrog, canebrake rattlesnake, Foster's tern, glossy ibis, great egret, Harper's fimbristylis, least tern, Mabee's salamander, night-heron yellow-crowned, and the peregrine falcon. The Canebrake rattlesnake has been found along the shore of the southwest branch of the Back River.

The USFWS, Virginia Field Office, were notified of the proposed action and alternatives (see Appendix A).

3.3.2 Water Resources

Water resources include surface and groundwater features located within the base as well as watershed areas affected by existing and potential runoff from the base, including floodplains. The ROI is defined as the base and the immediate vicinity.

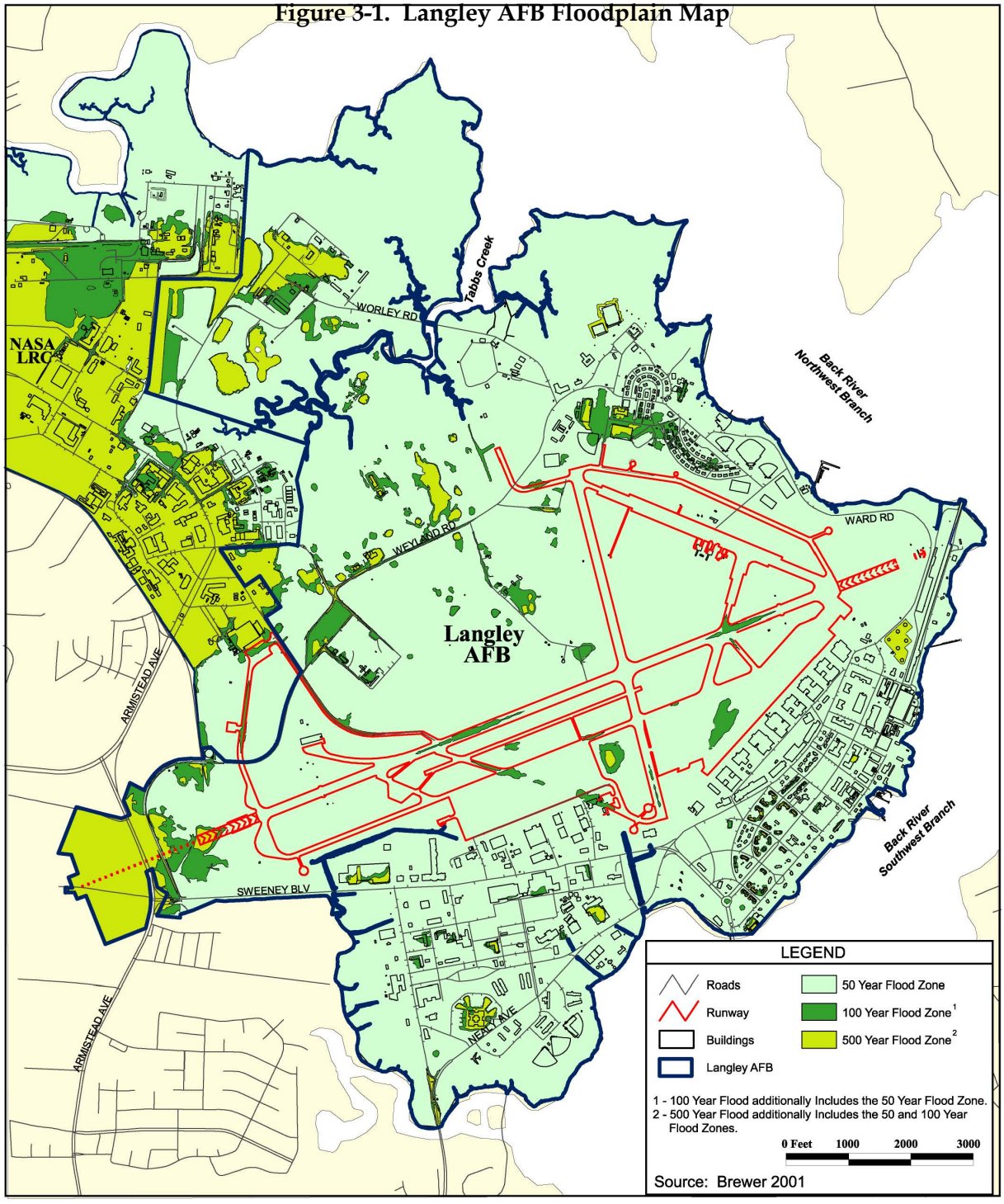
Langley AFB occupies a flat lowland peninsula with a gentle eastward slope of 1 foot per mile and elevations of 5 to 11 feet MSL within the Atlantic Coastal Plain physiographic province. The base is bounded on the northeast side by the Northwest Branch of the Back River, and on the southeast side by the Southwest Branch of the Back River, which flow into the Chesapeake Bay.

In the Langley AFB area, groundwater occurs in a shallow water table aquifer, an upper artesian aquifer system, and the principal artesian aquifer system. All three aquifers in this area contain water of moderate to poor quality due to high salinity and total dissolved solids; they have little or no potential for a conventional water supply.

Due to its proximity to the Back River and the Chesapeake Bay, much of Langley AFB lies within the 100-year floodplain. Langley AFB is susceptible to high tide surges during storms and spring tides, and flooding is sometimes severe on the base. Figure 3-1 illustrates the extent of the floodplains on Langley AFB. A 100-year flood would cover all of the area designated 50-year flood zone and the areas designated in the 100-year flood zone (see Figure 3-1). A 500-year flood would cover the 50- and 100-year floodplain areas, and the areas designated in the 500-year flood zone.

The proposed action site is located in the 100-year floodplain. An examination of Figure 3-1 indicates that areas above the 100-year floodplain are located within the clear zone on the

Figure 3-1. Langley AFB Floodplain Map



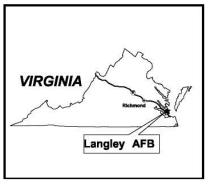


Figure 3-1

Langley AFB Floodplain Map

western end of the runway, and at a few small locations on the north side of the base within the golf course, away from existing infrastructure.

3.4 HAZARDOUS MATERIALS AND WASTE MANAGEMENT

Hazardous materials are identified and regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); the Occupational Safety and Health Administration (OSHA); and the Emergency Planning and Community Right-to-Know Act (EPCRA). Hazardous materials have been defined in AFI 32-7086, *Hazardous Materials Management*, to include any substance with special characteristics that could harm people, plants, or animals. Hazardous waste is defined in the Resource Conservation and Recovery Act (RCRA) as any solid, liquid, contained gaseous or semisolid waste, or any combination of wastes that could or do pose a substantial hazard to human health or the environment. Waste may be classified as hazardous because of its toxicity, reactivity, ignitibility, or corrosivity. In addition, certain types of waste are "listed" or identified as hazardous in 40 CFR 263.

HAZARDOUS MATERIALS

The majority of hazardous materials used by Air Force and contractor personnel at Langley AFB are controlled through an Air Force pollution prevention process called HAZMART. This process provides centralized management of the procurement, handling, storage, and issuing of hazardous materials and turn-in, recovery, reuse, or recycling of hazardous materials. The HAZMART process includes review and approval by Air Force personnel to ensure users are aware of exposure and safety risks.

HAZARDOUS WASTE

Langley AFB is a large-quantity hazardous waste generator. Hazardous wastes generated during operations and maintenance activities include solvents, metal-contaminated spent acids, and sludge from wash racks. Langley AFB recycles all lubricating fluids, batteries, oil filters, and shop rags. Hazardous wastes are managed in accordance with the *Langley AFB Hazardous Waste Management Plan*, dated 1 August 2001.

The 1 FW *Asbestos Management Plan 32-10* provides guidance on identification of asbestos-containing materials (ACMs) and the management of asbestos. An asbestos facility register, maintained by Civil Engineering, identifies ACMs (floor tile mastic, pipe insulation, ceiling material) in the building. Persons inspecting, designing, or conducting asbestos response actions in public or commercial buildings must be properly trained and accredited through an applicable asbestos training program. The design of building alteration projects and requests for self-help projects are reviewed to determine if asbestos contaminated materials are present in the proposed work area and, if so, are disposed of in an off base permitted landfill. A similar program is in-place to identify and control lead-containing materials in base facilities.

STORAGE TANKS

From 1942 to 1965, Building 442 served as the original base service station at Langley AFB. Gasoline was dispensed from underground storage tanks (USTs), which are believed to be located in front of the original building. In 1953 the building was expanded with additions on

each end and in 1965 it was converted to a shoppette with the expansion of building. No building drawings or records are available that identify the removal or closure of the USTs that were associated with the service station.

ENVIRONMENTAL RESTORATION PROGRAM

The Department of Defense (DoD) developed the Environmental Restoration Program (ERP) to identify, investigate, and remediate potentially hazardous material disposal sites that existed on DoD property prior to 1984. Forty-eight ERP sites, including one at Bethel Manor Housing, have been identified since the ERP began at Langley AFB. Thirty-three sites have been closed or require no further action. The remaining 15 sites are regulated under CERCLA and will be subject to a Federal Facility Agreement that is being negotiated with USEPA Region III. The *Langley AFB Management Action Plan* (Air Force 2001b) summarizes the current status of the base environmental programs and presents a comprehensive strategy for implementing actions necessary to protect human health and the environment. This strategy integrates activities under the ERP and the associated environmental compliance programs that support full restoration of the base. There are no ERP sites within the project area.

SOLID WASTE MANAGEMENT

Solid waste generated on Langley AFB is removed by contract services to either the City of Hampton's Bethel Sanitary Landfill or to the Hampton Waste-to-Energy facility for incineration. In Fiscal Year (FY) 00, the base generated 7,179 tons of solid waste and diverted 1,879 tons through recycling and composting activities. The base also generated 1,113 tons of construction and demolition debris.

3.5 NOISE

Noise is defined as any sound that is undesirable because it interferes with communication, is intense enough to damage hearing, or is otherwise annoying. Human response to noise varies according to the type and characteristics of the noise source, distance between source and receptor, receptor sensitivity, and time of day. The ROI for noise includes the area surrounding the project location.

Sound is measured with instruments that record instantaneous sound levels in decibels (dB). A-weighted sound level measurements (often denoted dBA) are used to characterize sound levels that are heard especially well by the human ear. All sound levels analyzed in this EA are A-weighted; thus, the term dB implies dBA unless otherwise noted.

At Langley AFB, noise contributions from aircraft operations and ground engine run-ups at the airfield have been calculated using the NOISEMAP model, the standard noise estimation methodology used for military airfields. NOISEMAP uses the following data to develop noise contours: aircraft types, runway utilization patterns, engine power settings, airspeeds, altitude profiles, flight track locations, number of operations per flight track, engine run-ups, and time of day. The *Final Environmental Impact Statement for the Initial F-22 Operational Wing Beddown* indicates that the proposed action site would be in the 65-75 Day-Night Average Sound Level (DNL) noise contour (Air Force 2001c).

3.6 AIR QUALITY

Air quality is described by the atmospheric concentration of six pollutants: ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter equal to or less than 10 micrometers in diameter (PM_{10}), and lead (Pb). Langley AFB is located within the Hampton Roads Intrastate Air Quality Control Region (AQCR) #223. The Hampton Roads AQCR includes four counties (York, James City, Isle of Wright, and Southampton), as well as nine independent cities (Chesapeake, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach, and Williamsburg). This area includes substantial industry, several military and commercial airfields, and a large population that generates air quality emissions. Table 3-2 summarizes the baseline emissions (stationary and mobile) of criteria pollutants and precursor emissions for this AQCR. Baseline Langley AFB emissions are incorporated into the totals for the AQCR. For each criteria pollutant, Langley AFB contributes less than 1 percent of the regional emissions. The base has been issued a Synthetic Minor operating permit from the VDEQ Title V program.

Table 3-2. Baseline Emissions for Langley AFB Affected Environment

Emissions	*Pollutants (tons per year)*				
	CO	**VOCs**	**NO_x**	**SO_2**	**PM_{10}**
Hampton Roads AQCR	257,325	79,750	83,560	110,220	49,860
Langley AFB	794.69	125.68	293.81	6.81	13.83
---Stationary Sources	33.79	21.18	52.61	1.21	5.63
---Mobile Sources	760.9	104.5	241.2	5.6	8.2

VOC = volatile organic compound
NO_x = nitrogen oxide
Sources: Federal Register (629123) June 26, 1997; Air Force 1999b; Air Force 2000b

Air quality in Hampton Roads AQCR is classified as attainment for all criteria pollutants. For ozone and its precursor pollutants (volatile organic compounds [VOCs] and oxides of nitrogen [NO_x]), the affected area is considered in "transitional attainment" or "maintenance." For the newly established 8-hour O_3 standard, the United States Environmental Protection Agency (USEPA) has proceeded with initial designations for a number of areas based on 3 years of consecutive monitoring data. Designations are either "nonattainment" or "attainment/ unclassifiable." While the future implementation date is still uncertain, once this new standard becomes enforceable, it appears that the Hampton Roads AQCR would not attain the 8-hour O_3 standard, based on data collected between 1999 and 2001 (USEPA 2002a). Also, monitoring data is being collected for determining compliance with the newly developed particulate matter equal to or less than 2.5 micrometers in diameter ($PM_{2.5}$) standard. Designation will be determined upon collection of the analysis of monitoring data (USEPA 2002b).

The CAA Section 176(c), General Conformity, establishes certain statutory requirements for federal agencies with proposed federal activities to demonstrate conformity of the proposed activities with each state's State Implementation Plan (SIP) for attainment of National Ambient Air Quality Standards (NAAQS). In 1993, USEPA issued the final rules for determining air quality conformity. Federal activities must not (1) cause or contribute to any new violation; (2) increase the frequency or severity of any existing violation; or (3) delay timely attainment of any standard, interim emission reductions, or milestones in conformity to a SIP's purpose of eliminating or reducing the severity and number of NAAQS violations or achieving attainment of NAAQS. General conformity applies only to non-attainment and maintenance areas. If the emissions from a federal action proposed in a non-attainment area exceed annual emission thresholds identified in the rule (*de minimis* levels) or are regionally significant (identified as equal to, or more than, 10 percent of the emissions inventory for the region), a conformity determination is required of that action. The thresholds become more restrictive as the severity of the non-attainment status of the region increases. For the newly adopted 8-hour O_3 and the $PM_{2.5}$ standards, according to USEPA Guidance (March 2000), conformity and other planning requirements would be triggered on the effective date of the final USEPA designations.

4.0 ENVIRONMENTAL CONSEQUENCES

Chapter 4.0 presents the environmental consequences of the proposed action and alternative at Langley AFB for each of the resource areas discussed in Chapter 3.0. To define the consequences, this chapter evaluates the project elements described in Chapter 2.0 against the affected environment provided in Chapter 3.0. Cumulative effects of the proposed action with other foreseeable future actions are presented in Chapter 5.0.

4.1 LAND USE

4.1.1 Proposed Action

LAND USE

Implementation of the proposed action would return the facility to its original exterior appearance within the Historic District. The proposed action is consistent with surrounding land uses and would be in accordance with the Enforceable Regulatory Programs of the Virginia Coastal Resources Management Program. This project would not have any component that would affect any of the following sections of the Enforceable Regulatory Program: Fisheries Management, Subaqueous Lands Management, Dunes Management, Point Source Pollution Control, Shoreline Sanitation, and Coastal Lands Management.

TRANSPORTATION

With the implementation of the proposed action, vehicular circulation would remain good. The facility is accessed from both eastbound and westbound lanes on Hammond Avenue to Mabry Avenue. Access from Dodd Boulevard is not available due to Mabry being one-way eastbound. The Building 442 parking lot is accessed from Mabry Avenue. The existing parking lot would provide ample space for users of Building 442.

Truck traffic associated with the construction would be directed through the West Gate and it is possible that this truck traffic may lead to some degradation of these road surfaces and occasional congestion at the West Gate. These adverse effects would be short-term and not significant.

VISUAL RESOURCES

Construction associated with Building 442 would occur in an area previously developed. The building is visible from key locations such as the Air Power Pavilion and Memorial Park. With the implementation of the proposed action, the building would be restored to its original facade and compliment the other facilities within the Historic District. The proposed action includes removal of two very large hackberry trees. Proposed landscaping includes planting other trees and shrubs. This development, with a consistent architectural design, would benefit the visual resources of the base with no negative effect to the existing visual and natural character of the base.

4.1.2 Alternative One

LAND USE

Under Alternative One, the proposed renovation of Building 442 would not occur; existing off-base office space would be used instead. No adverse impacts to land use are anticipated. This alternative is also in accordance with the Enforceable Regulatory Programs of the Virginia Coastal Resources Management Program to the maximum extent practicable.

TRANSPORTATION

Under Alternative One, the proposed renovation of Building 442 would not occur; existing off-base office space would be used instead. Impacts to transportation are not anticipated, however vehicular circulation on base would be reduced slightly. IG and XP personnel would be required to travel to and from off-base office space.

VISUAL RESOURCES

Under Alternative One, the proposed renovation of Building 442 would not occur; existing off-base office space would be used instead. Impacts to visual resources would continue, as Building 442 would not be restored to its original character within the Historic District.

4.1.3 No Action Alternative

No impacts to land use and transportation resources are anticipated under the no action alternative since the new construction would not occur and all existing structures and uses would remain unchanged. Impacts to visual resources would continue, as Building 442 would not be restored to its original character within the Historic District.

4.2 CULTURAL RESOURCES

A number of federal regulations and guidelines have been established for the management of cultural resources. Section 106 of the NHPA, as amended, requires federal agencies to take into account the effects of their undertakings on historic properties. Historic properties are cultural resources that are listed in, or eligible for listing in, the NRHP. Eligibility evaluation is the process by which resources are assessed relative to NRHP significance criteria for scientific or historic research, for the general public, and for traditional cultural groups. Under federal law, impacts to cultural resources may be considered adverse if the resources have been determined eligible for listing in the NRHP or have significance for Native American groups.

Analysis of potential impacts to cultural resources considers both direct and indirect impacts. Direct impacts may occur by physically altering, damaging, or destroying all or part of a resource; altering characteristics of the surrounding environment that contribute to the resource's significance; introducing visual or audible elements that are out of character with the property or alter its setting; or neglecting the resource to the extent that it deteriorates or is destroyed. Direct impacts are assessed by identifying the types and locations of proposed activity and determining the exact location of cultural resources that could be affected. Indirect impacts result primarily from the effects of project-induced population increases.

4.2.1 Proposed Action

Adverse impacts to historic architectural resources are not expected under the proposed action. Rehabilitation and adaptive reuse of Building 442 are expected to provide beneficial effects to the property, including demolition of a non-historic addition to the front of the building and restoration of the front facade to a condition representative of its original appearance. Rehabilitation would be conducted in consultation with the VDHR (refer to Appendix A), and in keeping with the *Secretary of the Interior's Standards for Rehabilitation* (36 CFR Part 67) and the architectural standards of the Langley Field Historic District. This rehabilitation would be completed in compliance with section 3b of the 2001 F-22 Beddown Memorandum of Agreement between Langley AFB and the Virginia SHPO (refer to Appendix B).

Impacts to archaeological resources are not expected under the proposed action. Building 442 is located in a disturbed area with low archaeological potential (Wheaton et al. 1991). Construction of the building addition is not expected to impact intact archaeological deposits. In the event of unanticipated discoveries of archaeological resources, work would halt in the area, and the resources would be managed in compliance with Section 106 of the NHPA and Air Force regulation.

No impacts to traditional resources are likely under the proposed action. No traditional resources have been identified at Langley AFB. There are no federally recognized Indian lands or resources at Langley AFB, and no issues have been identified by federally recognized or other Indian groups in Virginia.

4.2.2 Alternative One

Under Alternative One, Building 442 would not be renovated. Existing off-base office space would be used instead. Impacts to architectural resources could occur under this alternative. Not renovating Building 442 would result in non-compliance with section 3b of the 2001 F-22 Beddown Memorandum of Agreement between Langley AFB and the Virginia SHPO for mitigation of effects associated with the F-22 Beddown. No impacts to archaeological or traditional resources would be expected under this alternative. Use of existing off-base office space in non-historic buildings would not affect these resources.

4.2.3 No Action Alternative

Under the no action alternative, Building 442 would not be renovated. Impacts to architectural resources could occur under this alternative. Not renovating the building would result in non-compliance with section 3b of the 2001 F-22 Beddown Memorandum of Agreement between Langley AFB and the Virginia SHPO for mitigation of effects associated with the F-22 Beddown. No impacts to archaeological or traditional resources would be expected. Resources would continue to be managed in compliance with federal law and Air Force regulation.

4.3 PHYSICAL RESOURCES

4.3.1 Proposed Action

BIOLOGICAL RESOURCES

Under the proposed action, construction would disturb an area that is previously developed or landscaped, currently experiences high levels of continual human activity, lacks native terrestrial habitat, and exhibits a low level of biodiversity. The only plant or animal species likely to be displaced from this marginal habitat are individuals of common and locally abundant species. The overall ecological effect would therefore be insignificant.

There would be no impacts to wetlands from the implementation of the proposed action and the proposed action would not conflict with the wetlands management program associated with the Virginia Coastal Zone Management Program.

Standard construction practices would be applied to control sedimentation and erosion during construction, thereby avoiding secondary effects to any wetlands or freshwater aquatic communities. With the implementation of these practices during construction, no adverse environmental consequences are anticipated.

Species listed, proposed for listing, or candidates for listing as threatened and endangered in accordance with the ESA of 1973 (87 Stat. 884, as amended; 16 USC 1531 *et seq.*) are not anticipated to be adversely affected by the proposed action (see Appendix A).

State-protected species would also not be adversely affected by the proposed action because their habitat would not be altered and because changes in base activities are not expected to be biologically significant. No special species or sensitive habitats are expected to be impacted.

WATER RESOURCES

Construction at Building 442 would be within the 100-year floodplain. Filtration would control storm water runoff and soil erosion from the site. Prior to the start of construction, silt fences, storm drain inlet and outlet protection, and other appropriate standard construction practices would be instituted. Since less than one acre would be disturbed by construction, a Virginia Pollutant Discharge Elimination System (VPDES) Stormwater General Permit would not be required.

There would be no impacts to water resources from point source or non-point sources with implementation of the proposed action, and the proposed action would not conflict with point source or non-point source pollution control objectives associated with the Virginia Coastal Zone Management Program.

4.3.2 Alternative One

Under Alternative One, the proposed renovation of Building 442 would not occur; instead, existing off-base office space would be used. Impacts to physical resources are not anticipated.

4.3.3 No Action Alternative

Under the no action alternative, construction would not occur; the 1 FW IG and XP squadrons would not have a facility to accomplish their respective missions. There would be no environmental consequences to this resource.

4.4 HAZARDOUS MATERIALS AND WASTE MANAGEMENT

4.4.1 Proposed Action

HAZARDOUS MATERIALS

Hazardous materials demolition and renovation of Building 442 may require the use of hazardous materials by contractor personnel. In accordance with the base's HAZMART procedure, copies of Material Safety Data Sheets must be provided to the base and maintained on the construction site. The base would maintain any hazardous materials used by base personnel in the operation of the building and no adverse environmental consequences are anticipated. Project contractors would comply with federal, state, and local environmental laws and would employ affirmative procurement practices when economically and technically feasible.

HAZARDOUS WASTE

Contractor personnel may generate hazardous waste, such as paints, adhesives, and batteries, during construction. These wastes must be stored in an approved Department of Transportation container next to the point of operation. Disposal of these wastes would be the responsibility of the site contractor.

Implementation of the proposed action would include building demolition. A 10-day notification must be submitted to USEPA and a 20-day notification to the Virginia Department of Labor and Industry prior to the intended demolition date. Prior to any demolition activities, the building would be re-inspected to identify all asbestos, including Category I and Category II non-friable ACM and lead-containing materials. Upon classification as friable and non-friable, all waste ACM would be transported and disposed of in accordance with applicable federal and state regulations. It is probable that lead-containing materials are also present in the building. Lead-containing materials would also be disposed of in accordance with applicable regulations. Furthermore, all wastes generated by construction of the facilities associated with the proposed action would be managed in accordance with local, state, and federal regulatory requirements.

STORAGE TANKS

Demolition activities would take place over the area that may still have USTs from the original base service station. If the contractor encounters the USTs during the demolition, the contractor would work with the Langley's Civil Engineering to ascertain the status of the USTs and determine if there is any structural integrity concerns operating construction equipment over the old USTs. The contractor may also be required to test and remove fuel contaminated soils and/or groundwater discovered during the construction process in accordance with Virginia

regulations. If necessary, the USTs may require closure in accordance with Virginia UST regulations.

SOLID WASTE

Operation of Building 442 would generate minimal amounts of hazardous or solid waste. Overall there would be a slight increase in the amount of waste generated as a result of the removal of ACMs and lead-containing materials.

No significant environmental consequences associated with waste management practices would be expected with the implementation of the proposed action.

4.4.2 Alternative One

Under Alternative One, the proposed renovation of Building 442 would not occur; instead, existing off-base office space would be used. No adverse environmental consequences are expected.

4.4.3 No Action Alternative

Under the no action alternative, construction would not occur; the 1 FW IG and XP staff agencies would not have a facility to accomplish their respective missions. No adverse environmental consequences are expected.

4.5 NOISE

Noise impact analyses typically evaluate potential changes to existing noise environments that would result from implementation of a proposal. Potential changes in the noise environment can be (1) beneficial (i.e., if they reduce the number of sensitive receptors exposed to unacceptable noise levels); (2) negligible (i.e., if the total area exposed to unacceptable noise levels is essentially unchanged); or (3) adverse (i.e., if they result in increased exposure to unacceptable levels).

4.5.1 Proposed Action

Implementation of the proposed action would have minor, temporary increases in localized noise levels in the vicinity of the project area during construction. The base is an active military facility that typically experiences high noise levels from daily flight operations. Use of heavy equipment for site preparation and development (i.e., grading, fill, and construction) would generate noise. However, noise would be similar to typical construction noise, last only the duration of the specific construction activities, and could be reduced by the use of equipment sound mufflers and restricting construction activity to normal working hours (i.e., between 7:00 a.m. and 5:00 p.m.). The only potentially sensitive receptor is Lawson Hall, located approximately one block south of Building 442, however, the limited construction hours should reduce any potential disturbance to these visitors quarters. Compared with aircraft noise, noise produced by construction would be relatively lower in magnitude, and spread out during the business day. Noise from truck traffic hauling construction materials to the site would not affect base residents because the West Gate would provide construction access. The noise

disruptions would be temporary and would be limited to daytime hours; therefore, impacts are considered insignificant.

4.5.2 Alternative One

Under Alternative One, the proposed renovation of Building 442 would not occur; existing off-base office space would be used. Noise levels would remain unchanged since construction would not occur.

4.5.3 No Action Alternative

Under the no action alternative, construction would not occur. Noise levels would remain the same as they are currently.

4.6 AIR QUALITY

4.6.1 Proposed Action

The air quality analysis for the proposed action at Langley AFB quantifies the changes due to the renovation of Building 442. To assess the affects of the proposed action, analysis must include direct and indirect emissions from all activities that would affect the regional air quality. Emissions from the proposed action are either "presumed to conform" (based on emissions levels that are considered insignificant in the context of overall regional emissions) or must demonstrate conformity with approved SIP provisions.

While construction activities are of short duration, emissions during the construction period were considered to determine their impacts on regional air quality. The construction phase would span a nine-month period. These emissions were compared to existing baseline emissions and federal conformity *de minimis* thresholds for O_3 precursors (VOCs and NO_x). Emissions of VOC, NO_x, CO, and PM_{10} from construction activities were evaluated using emission factors from the *California Environmental Quality Act Air Quality Handbook* (South Coast Air Quality Management District 1993). The emission factors included contributions from exhaust emissions (i.e., on-site construction equipment, material handling, and workers' travel) and fugitive dust emissions (e.g., from grading activities).

Total construction emissions generated on base and within the Hampton Roads AQCR are less than one percent when compared to regional emissions and are below the 100 tons per year *de minimis* federal conformity thresholds for NO_x and VOCs. Emissions generated by construction projects are temporary in nature and would end when construction is complete. The emissions from fugitive dust would be significantly less due to the implementation of control measures in accordance with standard construction practices. For instance, frequent spraying of water on exposed soil during construction, proper soil stockpiling methods, and prompt replacement of ground cover or pavement are standard landscaping procedures that could be used to minimize the amount of dust generated during construction. Using efficient grading practices and avoiding long periods where engines are running at idle may reduce combustion emissions from construction equipment. Vehicular combustion emissions from construction worker commuting may be reduced by carpooling.

Direct operational emissions would be associated with operation of a natural gas-fired boiler in Building 442. No additional emissions are anticipated from personnel traveling to Building 442, since the personnel working at Building 442 are already employed at Langley. Operational emissions from the boiler were calculated using emission factors from *Air Emissions Inventory Guidance Document for Stationary Sources at Air Force Installations* (Air Force/IERA 1999).

No changes to the Synthetic Minor Operating permit issued by VDEQ Title V program are anticipated. Relative to overall base emissions, the renovation of Building 442 would result in extremely minor increases in criteria pollutants.

General conformity regulations set forth in 40 CFR 51 Subpart W, and adopted in the Virginia Administrative Code (9 VAC 5 Chapter 160), outline *de minimis* levels of emissions, below which it is presumed that the action conforms to the SIP. The *de minimis* levels for O_3 precursors in a maintenance area outside of an O_3 transport region (i.e., Hampton Roads AQCR) are 100 tons per year of VOCs emissions and 100 tons per year of NO_x. In addition, the proposed action's emissions (both direct and indirect) must be compared to the regional inventory to determine if the emissions are "regionally significant." Emission increases of O_3 precursors (NO_x and VOCs) are well below the threshold thus demonstrating compliance with Clean Air Act conformity requirements. In addition, the proposed action emissions are well below the regional significance threshold defined by 10 percent of the regional emissions (i.e., 836 tons per year of NO_x and 797 tons per year of VOCs).

4.6.2 Alternative One

With the implementation of this alternative no renovation of Building 442 would occur. Langley AFB XP and IG personnel that currently commute from their residences in nearby communities would travel to office space in the nearby cities of Hampton or Newport News. This change in work location could potentially increase motor vehicle emissions; however this increase is anticipated to be minor when compared to the total emissions generated in the Hampton Roads AQCR.

No changes to the Synthetic Minor Operating permit issued by VDEQ Title V program are anticipated. Relative to overall base emissions, the implementation of this alternative would result in negligible increases in criteria pollutants. These changes would not measurably change base air quality or affect attainment status.

4.6.3 No Action Alternative

Under the no action alternative, construction would not occur. Air quality would remain the same as present conditions.

5.0 CUMULATIVE EFFECTS AND IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

5.1 CUMULATIVE EFFECTS

This section provides (1) a definition of cumulative effects, (2) a description of past, present, and reasonably foreseeable actions relevant to cumulative effects, and (3) an evaluation of cumulative effects potentially resulting from these interactions.

5.1.1 Definition of Cumulative Effects

CEQ regulations stipulate that the cumulative effects analysis within an EA should consider the potential environmental impacts resulting from "the incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions" (40 CFR 1508.7). Recent CEQ guidance in *Considering Cumulative Effects* affirms this requirement, stating that the first steps in assessing cumulative effects involve defining the scope of the other actions and their interrelationship with the proposed action. The scope must consider geographic and temporal overlaps among the proposed action and other actions. It must also evaluate the nature of interactions among these actions.

Cumulative effects are most likely to arise when a relationship or synergism exists between a proposed action and other actions expected to occur in a similar location or during a similar time period. Actions overlapping with, or in close proximity to, the proposed action would be expected to have more potential for a relationship than actions that may be geographically separated. Similarly, actions that coincide, even partially, in time would tend to offer a higher potential for cumulative effects.

To identify cumulative effects, this EA addresses three questions:

1. Does a relationship exist such that elements of the proposed action might interact with elements of past, present, or reasonably foreseeable actions?
2. If one or more of the elements of the proposed action and another action could be expected to interact, would the proposed action affect or be affected by impacts of the other action?
3. If such a relationship exists, does an assessment reveal any potentially significant impacts not identified when the proposed action is considered alone?

In this EA, an effort has been made to identify all actions that are being considered and that are in the planning phase at this time. To the extent that details regarding such actions exist and the actions have a potential to interact with the proposed action in this EA, these actions are included in this cumulative analysis. This approach enables decisionmakers to have the most current information available so that they can evaluate the environmental consequences of the proposed action.

5.1.2 Past, Present, and Reasonably Foreseeable Actions

This EA applies a stepped approach to provide decisionmakers with not only the cumulative effects of the proposed action, but also the incremental contribution of past, present, and reasonably foreseeable actions.

PAST AND PRESENT ACTIONS RELEVANT TO THE PROPOSED ACTION

Langley AFB is an active military installation that undergoes continuous change in mission and in training requirements. This process of change is consistent with the U.S. defense policy that the Air Force must be ready to respond to threats to American interests throughout the world. In 1998, the Air Force implemented a force structure change that added 12 F-15C aircraft and 134 personnel to Langley AFB, increasing the total number of F-15C aircraft to 66. Recently the base completed establishing a Combined Air Operations Center-Experimental and the beddown of the Aerospace Expeditionary Force Center.

The base, like any other major institution, also requires occasional new construction, facility improvements, and infrastructure upgrades. Langley AFB is currently upgrading portions of its water and wastewater system and has recently completed a new library and water tower. Currently a new fitness center and dormitory complex are under construction and the Langley Tow Tank has been demolished.

INCREMENTAL IMPACTS OF THE PROPOSED ACTION WITH REASONABLY FORESEEABLE FUTURE ACTIONS

During the timeframe FY 03 to FY 06, Langley AFB has proposed a number of actions that are independent of the proposed action and would be implemented irrespective of a decision on the proposed renovation of Building 442. Construction programs include a new water tower ($1.3 million in 2003), family housing ($5.6 million in 2003), privatizing family housing ($17 million in 2003), a new housing office ($1.2 million in 2003), demolition of Building 633 (2004) youth center ($5 million in 2004). In addition to these ongoing infrastructure improvements, Langley AFB has been selected for the beddown of the Initial Operational Wing of the new F/A-22 aircraft. The majority of the proposed projects associated with the F/A-22 beddown at Langley AFB would be constructed along the flightline and have the potential to disturb approximately 16 acres.

5.1.3 Analysis of Cumulative Impacts

The following analysis examines how the impacts of these other actions might be affected by those resulting from the proposed action at Langley AFB and whether such a relationship would result in potentially significant impacts not identified when the proposed action is considered alone.

A previous EA for the implementation of a force structure change at Langley AFB and the construction of the new water tower did not identify any significant environmental consequences (Air Force 1998b, 2001d). The result of the force structure change left Langley AFB operating at levels below those occurring in the early 1990s. The establishment of a Combined Air Operations Center-Experimental and the beddown of the Aerospace

Expeditionary Force Center, while adding a total of 122 new personnel, qualified for categorical exclusions because no new construction was required to support the actions.

The beddown of the Initial Operational Wing of F/A-22 aircraft has been analyzed in an Environmental Impact Statement (Air Force 2001c). Construction at Langley AFB, would impact the architectural and visual aspects of the Langley Historic District. Given that the proposed F/A-22 construction would have a minimal effect on noise, air quality, and traffic, the combined environmental consequences of these actions would remain well below the threshold of significance for these resources.

None of the future infrastructure actions (analyzed in separate environmental documents) would be expected to result in more than negligible impacts either individually or cumulatively. All actions affect very specific, circumscribed areas, and the magnitude of the actions is minimal. Given that the proposed action would likewise have a minimal effect within the base, the combined impacts of these actions would remain well below the threshold of significance for any resource category.

5.2 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

NEPA requires that environmental analysis include identification of ". . . any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented." Irreversible and irretrievable resource commitments are related to the use of nonrenewable resources and the effects that the uses of these resources have on future generations. Irreversible effects primarily result from the use or destruction of a specific resource (e.g., energy and minerals) that cannot be replaced within a reasonable time frame. Irretrievable resource commitments involve the loss in value of an affected resource that cannot be restored as a result of the action (e.g., extinction of a threatened or endangered species or the demolition of a historic building).

For the proposed action, most resource commitments are neither irreversible nor irretrievable. Most environmental consequences are short term and temporary (such as air emissions from construction) or longer lasting but negligible (e.g., utility increases). Those limited resources that may involve a possible irreversible or irretrievable commitment under the proposed action are discussed below.

Renovation of Building 442 would require consumption of limited amounts of materials typically associated with demolition, interior and exterior construction (e.g., concrete, wiring, insulation, and windows). The amount of these materials used is not expected to significantly decrease the availability of the resources.

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Persons and Agencies Contacted

Allan, Suzanne. 2003. 1 CES, Langley Air Force Base, Virginia.

Davis, E. 2001. Endangered Species Specialist, U.S. Fish and Wildlife Service, Gloucester, Virginia.

Wilcox, T. 2001. Environmental Services Biologist, Virginia Department of Game and Inland Fisheries, Richmond, Virginia.

Wittkamp, Thomas. 2003. 1 CES, Langley Air Force Base, Virginia.

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7.0 LIST OF PREPARERS

David M. Dischner, Project Manager
B.A., Urban Affairs, Virginia Polytechnic Institute and State University, Blacksburg, 1974
Hazardous Materials Management Certificate, University of California, Riverside, 1988
Years of Experience: 26

Jerry Dougherty, Hazardous Materials/Hazardous Waste
B.S., Civil Engineering, New Mexico State University, 1960
M.S., Civil Engineering, University of Oklahoma, 1972
Years of Experience: 29

Claudia A. Druss, Cultural Resources
B.A., University of Colorado, Boulder, 1977
M.A., Anthropology, Idaho State University, Pocatello, 1980
Years of Experience: 20

Kimberly Freeman, Production Manager
Years of Experience: 16

Sheri Freemuth, Deputy Project Manager
B.A., Political Science, Scripps College, 1982
M.C.P., City Planning, San Diego State University, 1985
Certified Planner, American Institute of Certified Planners, 1996
Years of Experience: 17

Jake Fruhlinger, Cultural Resources
B.A., Anthropology, Boise State University, 1997
Years of Experience: 9

Claudia Laughlin, Graphics
Years of Experience: 6

Christa Stumpf, Land Use, Physical Resources, and Noise
B.S., Resource Recreation and Tourism, University of Idaho, 1995
M.S., Forest Resources and Geographic Information Systems, University of Idaho, 1996
Years of Experience: 6

Robert E. Van Tassel, Program Manager
B.A., Economics, University of California, Santa Barbara, 1970
M.A., Economics, University of California, Santa Barbara, 1972
Years of Experience: 25

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APPENDIX A
CONSULTATION LETTERS

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 1ST FIGHTER WING
LANGLEY AIR FORCE BASE VA

Ms. Susan Smead
Architectural Historian
Virginia Department of Historic Resources (VDHR)
2801 Kensington Avenue
Richmond VA 23221

Dear Susan

The Department of Defense, US Air Force, proposes the renovation of F. 442 located at Langley Air Force Base in Hampton, Virginia. We wish to formally initiate consultation and find that this undertaking constitutes a No Adverse Effect on historic properties.

Historic Properties

The resource scheduled for renovation consists of a single structure known as Facility 442. The building, which was originally constructed as a Post Exchange gas and service station, has been identified as a contributing element to the Langley Field Historic District.

The historic district itself was identified as eligible for listing in the National Register of Historic Places in 1997 under Criterion A for its association with significant events and trends in military history, and under Criterion C, as an entity illustrating the evolution of construction within the Army Air Corps between 1916 and 1945. Concurrence on the National Register eligibility of the resource was received from your office in 1997. Formal listing of the Langley Field Historic District in the National Register of Historic Places has not yet been sought. Draft nomination materials, prepared by the National Park Service in June 1995, are currently on file with VDHR.

The structure affected by this undertaking was constructed in 1940. It served as a Post gas and service station until 1965 and was subsequently converted for use as an AAFES convenience store. In 1997 the convenience store moved to another location and since then, the building has remained vacant.

Project Description

The building will be renovated and adaptively reused for a 1 FW administrative function in accordance with the F-22 Beddown MOA signed into effect in Dec 01.

The design entails demolition of a 105' by 30' non-historic addition on the front of the building, as well as removal of a concrete pad and transformer unit to the rear. The front façade will then be restored to a condition representative of its original appearance. Windows

replicating the original garage bay doors will be installed. A leaded glass window over the front door will be removed, restored, and reinstalled. The slate roof will be removed and salvaged to facilitate replacement of the underlayment and copper flashing. The original slate will then be reinstalled, along with new copper gutters and flashing throughout.

On the rear of the building, a new 50' by 20' foot conference room addition will be constructed to allow for the adaptive reuse of the building. It will be made of brick to match historic material and roofed with a synthetic slate to match the existing. Flashing and gutters will be fabricated from copper.

Project Justification

The building is located on a site identified in the Base Comprehensive Plan as being suitable for administrative land uses. This space is needed to house miscellaneous 1st Fighter Wing administrative uses.

Project Effects

The renovation of this structure located within the National Register-eligible Langley Field Historic District has been assessed as a No Adverse Effect for the purposes of Section 106 of the National Historic Preservation Act of 1966, as amended. Langley Air Force Base has ensured that the addition is designed in accordance with the Secretary of Interior's Standards and that the adaptive reuse of the facility will allow for this.

A 90% submittal of the design drawings have been forwarded for your review. Several redline comments are presented on those drawings to reflect changes discussed at a recent on-board design review meeting. These changes will all be incorporated into the final design.

Thank you in advance for your time and consideration. Should you have any questions, please feel free to contact Ms. Suzanne Allan, Base Cultural Resources Manager, either by telephone at (757) 764-2696, or e-mail suzanne.allan@langley.af.mil.

Suzanne P. Allan

SUZANNE P. ALLAN, AICP
Base Cultural Resources Manager

Attachment:
90% Design Drawings

Science Applications International Corporation
An Employee-Owned Company

12 February 2003

Dear Sirs:

The U.S. Air Force is preparing an Environmental Assessment (EA) to evaluate potential environmental impacts associated with the renovation of Building 442 and to comply with section 3b of the 2001 F-22 Beddown Memorandum of Agreement between Langley AFB and the Virginia State Historic Preservation Office. In addition to evaluating the renovation of Building 442 (Attachment 1) the EA will evaluate the alternative of leasing office space within a nearby commercial office building.

Pursuant to the Endangered Species Act and the National Environmental Policy Act we must consider potential impacts of the proposed action to federally listed threatened, endangered, candidate and proposed to be listed species that occur or may occur in the potentially affected area. We have received species information from various federal and state offices recently and would like to confirm these lists (see Attachment 2) with your office. Please provide your response to: SAIC, Bldg 442 EA-Dischner, 22 Enterprise Parkway, Suite 200, Hampton VA 23666. Until the extent of the potential impact to listed species is determined, we will make no decision regarding the need for a section 7 consultation.

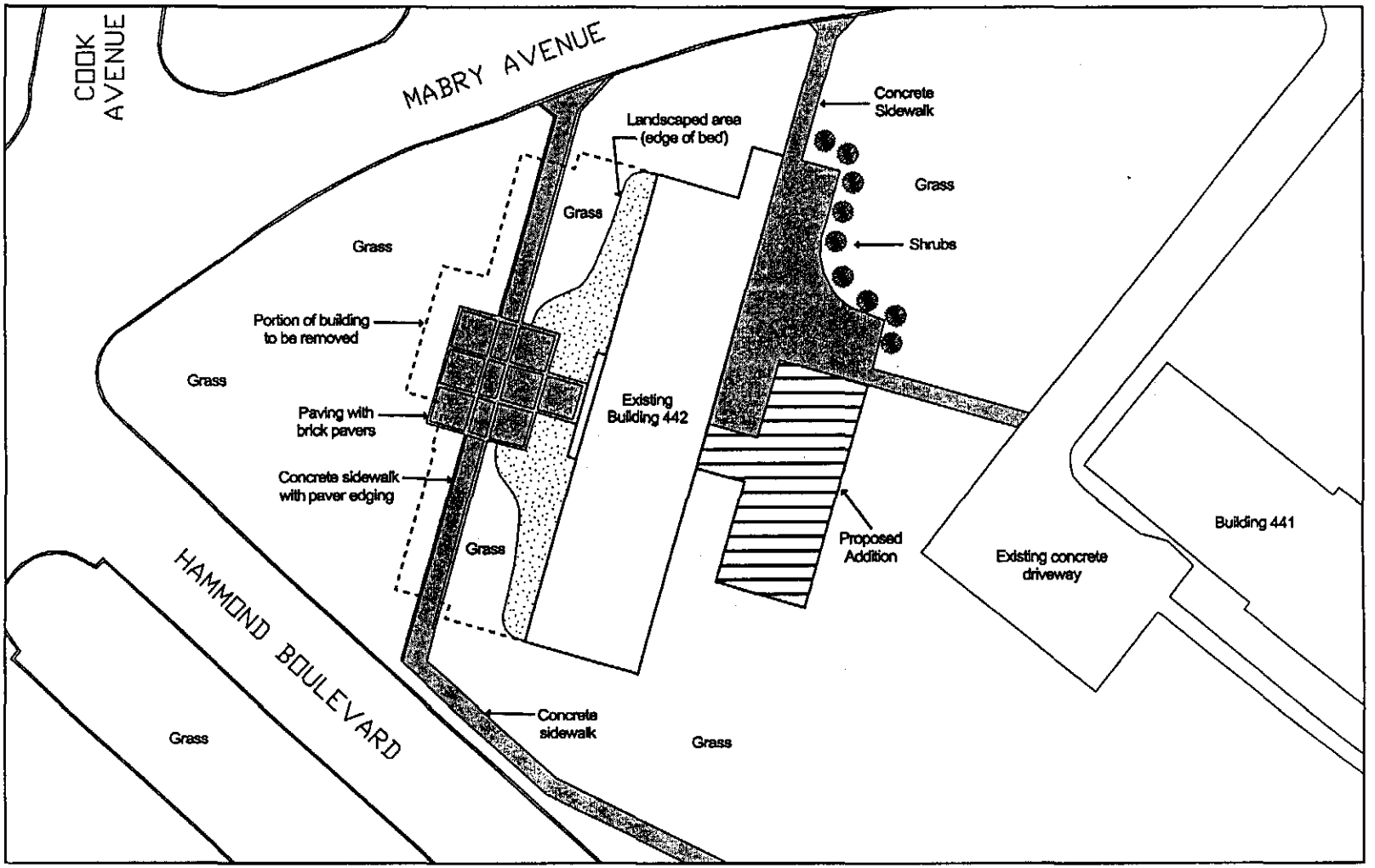
Sincerely,

Science Applications International Corporation

David Dischner
Project Manager

Attachments:
1. Project Location
2. Threatened and Endangered Species List
3. Distribution List

22 Enterprise Parkway, Suite 200, Hampton, Virginia 23666 • (757) 825-6334 • Fax: (757) 825-9104
Other SAIC Offices: Albuquerque, Colorado Springs, Dayton, Falls Church, Huntsville, Las Vegas, Los Altos, Los Angeles, McLean, Oak Ridge, Orlando, San Diego, Seattle, Tucson



Building 442 - Proposed Action

Table 3-1. Threatened, Endangered, and Special-Status Species/ Communities that Occur or Potentially Occur on Langley AFB

Species	*Status*	*Areas of Occurrence*
Plants		
Harper's fimbristylis *Fimbristylis perpusill*	SE	Coastal seasonal ponds.
Virginia least trillium *Trillium pusillum var. virginianum*	FSC	Forested wetlands and mesic woods including the "green sea" wetlands. Recorded from the City of Hampton.
Invertebrates		
Northeastern beach tiger beetle *Cicindela dorsalis dorsalis*	FT	Broad beaches with well-developed sand dunes.
Amphibians		
Barking treefrog *Hyla gratiosa*	ST	Breeds in coastal seasonal freshwater ponds. Needs fish-free breeding habitat. Base at northern edge of range. Spends warm months in treetops, seeks moisture during dry periods by burrowing among tree roots and clumps of vegetation.
Mabee's salamander *Ambystoma mabeei*	ST	Breeds in coastal seasonal freshwater ponds. Needs fish-free breeding habitat. Tupelo and cypress bottoms in pine woods, open fields, and lowland deciduous forest.
Reptiles		
Canebrake rattlesnake *Crotalus horridus atricaudatus*	SE	Meadows, canebrake or "green sea" wetlands. At risk because of wetland loss. Swampy areas, canebrake thickets, and floodplains.
Birds		
Bald eagle *Haliaeetus leucocephalus*	FT/SE	Forages occasionally on base. Nests within three miles of the base.
Foster's tern *Sterna forsteri*	SS	Coastal and marshland bird that fishes the waters of the region.
Glossy ibis *Plegadis falcinellus*	SS	Wades in marshes and fishes the waters of the region.
Great egret *Asmerodius albus*	SC	Palustrine and estuarine wetlands; marshes.
Night-heron yellow-crowned *Nyctanassa violacea violacea*	SS	Wades in marshes and fishes the waters of the region.
Northern harrier *Circus cyaneus*	SS	Hunts over marshes and fields and is known to nest in the area.
Least tern *Sterna antillarum*	SS	Found feeding or nesting on beaches in the area.
Peregrine falcon *Falco peregrinus*	SE	Observed foraging over salt marshes on base. Open wetlands near cliffs.
Piping plover *Charadrius melodius*	FT/ST	Prefers areas with expansive sand or mudflats (for foraging) in close proximity to a sand beach (for roosting). Fifty-two designated critical habitat units from North Carolina south to northern Florida along mainland beaches and barrier islands.

Notes: FSC = Federal Species of Concern
FT = Federal Threatened
SC = State Candidate
SE = State Endangered
SS= State Sensitive
ST = State Threatened

COMMONWEALTH of VIRGINIA

W. Tayloe Murphy, Jr.
Secretary of Natural Resources

Department of Game and Inland Fisheries

William L. Woodfin, Jr.
Director

February 24, 2003

David Dischner
Project Manager
SAIC
22 Enterprise Parkway Suite 200
Hampton, Virginia 23666

RE: ESSLOG #18566, Building 442 renovation

Dear Mr. Dischner:

This letter is in response to your request for information related to the presence of threatened or endangered species in the vicinity of the above referenced project.

The *state endangered* canebrake rattlesnake (*Crotalus horridus*) has been documented in the project area. The applicant should coordinate with this Department to evaluate potential impacts to this species.

In addition, this project area is adjacent to a stream reach containing a documented occurrence of American shad (*Alosa sapidissima*). The applicant should coordinate with this Department regarding potential impacts to this species.

This project is also within one mile of waterbird colonies containing the *state special concern* great egret (*Ardea alba*) and yellow-crowned night-heron (*Nyctanassa violacea*). The applicant should coordinate with this Department and with the U.S. Fish and Wildlife Service to evaluate potential impacts to these resources.

Finally, the *federal species of concern* northern diamond-backed terrapin (*Malaclemys* terrapin) and the following *state special concern* species have been documented in the project area: northern harrier (*Circus cyaneus*), glossy ibis (*Plegadis falcinellus*), saltmarsh sharp-tailed sparrow (*Ammodramus caudacutus*), Caspian tern (*Sterna caspia*), Forster's tern (*S. forsteri*), and least tern (*S. antillarum*). "Federal species of concern/state special concern" is not a legal designation, and no coordination is required for these species at this time.

Information about fish and wildlife species was generated from our agency's computerized Fish and Wildlife Information System, which describes animals that are known or may occur in a particular geographic area. Field surveys may be necessary to determine the presence or absence of some of these species on or near the proposed area. Also, additional sensitive animal species may be present, but their presence has not been documented in our information system.

Endangered plants and insects are under the jurisdiction of the Virginia Department of Agriculture and Consumer Services, Bureau of Plant Protection. Questions concerning sensitive plant and insect species occurring at the project site should be directed to Keith Tignor at (804) 786-3515.

There is a processing charge of $25.00 for our response. Please remit a check, made payable to **TREASURER OF VIRGINIA**, within 30 days to MaryBeth Murr at the address listed on the first page. Include a copy of this letter with your payment to ensure that your account is properly credited.

This letter summarizes the likelihood of the occurrence of endangered or threatened animal species at the project site. If you have additional questions in this regard, please contact me at (804) 367-8001. Please note that this response does not address any other environmental concerns; these issues are analyzed by our Environmental Services Section, in conjunction with interagency review of applications for state and federal permits. If you have any questions in this regard, please contact Brian Moyer at (804) 367-6913.

Please note that the data used to develop this response are continually updated. Therefore, if significant changes are made to your project or if the project has not begun within 6 months of receiving this letter, then the applicant should request a new review of our data.

The Fish and Wildlife Information Service, the system of databases used to provide the information in this letter, can now be accessed via the Internet! The Service currently provides access to current and comprehensive information about all of Virginia's fish and wildlife resources, including those listed as threatened, endangered, or special concern; colonial birds; waterfowl; trout streams; and all wildlife. Users can choose a geographic location and generate a report of species known or likely to occur around that point. From our main web page, at www.dgif.state.va.us, choose the hyperlink to "Wildlife", then "Wildlife Information & Mapping Services" and then "Wildlife Information Online Service". For more information, please contact Amy Martin, Online Service Coordinator, at (804) 367-2211.

Thank you for your interest in the wildlife resources of Virginia.

Sincerely,

W. Adam Phelps
Wildlife Biologist

cc: R.T. Fernald, VDGIF
Eric Davis, USFWS

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
6669 Short Lane
Gloucester, VA 23061

March 10, 2003

Mr. David Dischner
Science Applications International Corporation
22 Enterprise Parkway, Suite 200
Hampton, Virginia 23666

Re: Renovation of Building 442 at
Langley Air Force Base, #2853
Hampton, Virginia

Dear Mr. Dischner:

The U.S. Fish and Wildlife Service (Service) has reviewed your February 12, 2003 request for information on Federally listed and proposed endangered and threatened species and designated critical habitat for the above referenced project. The following comments are provided under provisions of the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*).

The proposed project is to evaluate the renovation of Building 442 at Langley Air Force Base and to evaluate the alternative of leasing office space within a nearby commercial office building in Hampton, Virginia. Based on the project description and location, it appears that this project is not likely to adversely affect any Federally listed or proposed species or their designated critical habitat. Should project plans change, or if additional information on the distribution of listed or proposed species or critical habitat becomes available, this determination may be reconsidered.

If you have any questions or need further assistance, please contact Kerry Linehan of this office at (804) 693-6694, extension 127.

Sincerely,

Karen L. Mayne
Supervisor
Virginia Field Office

CEV KHW 3/31/03
CEVQ
cc: — CEC

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

W. Tayloe Murphy, Jr.
Secretary of Natural Resources

Street address: 629 East Main Street, Richmond, Virginia 23219
Mailing address: P.O. Box 10009, Richmond, Virginia 23240
Fax (804) 698-4500 TDD (804) 698-4021
www.deq.state.va.us

Robert G. Burnley
Director

(804) 698-4000
1-800-592-5482

March 26, 2003

Mr. Kenneth H. Walker
Chief, Environmental Management Flight
1 CES/CEV
37 Sweeney Boulevard
Langley AFB, Virginia 23665-2107

RE: Environmental Assessment and Federal Consistency Determination on Renovation of Building 442, Langley Air Force Base, Hampton, Virginia (DEQ-03-033F)

Dear Mr. Walker:

The Commonwealth of Virginia has completed its review of the Environmental Assessment (EA) and Consistency Determination for the above-referenced project. The Department of Environmental Quality (DEQ) is responsible for coordinating Virginia's review of federal environmental documents and responding to appropriate federal officials on behalf of the Commonwealth. In addition, as you are aware, pursuant to the Coastal Zone Management Act of 1972, as amended, federal actions that can have foreseeable effects on Virginia's coastal uses or resources must be conducted in a manner which is consistent, to the maximum extent practicable, with the Virginia Coastal Program (VCP). The Department of Environmental Quality (DEQ) is responsible for coordinating Virginia's review of federal consistency determinations and responding to appropriate officials on behalf of the Commonwealth.

The following agencies and planning district commission participated in the review of this EA and consistency determination:

Department of Environmental Quality
Department of Conservation and Recreation
Chesapeake Bay Local Assistance Department
Department of Agriculture and Consumer Services
Department of Historic Resources
Department of Health
Hampton Roads Planning District Commission

The Department of Game and Inland Fisheries and the City of Hampton were also invited to comment.

Project Description

The Air Force proposes to renovate and add to Building 442 at Langley Air Force Base in Hampton, Virginia. The addition would include conference, electrical/communication, mechanical and storage rooms as well as sidewalks around the building. The addition is located behind the existing Building 442.

Environmental Impacts and Mitigation

1. Wetlands and Water Quality. The EA (page 3-5) states that there are no wetlands at the site of the proposed project. Also, a wetland delineation of the entire base currently is under jurisdictional determination review by the Norfolk U.S. Army Corps of Engineers. The DEQ Office of Water Permits Support and the DEQ-Tidewater Regional Office state that no Virginia Water Protection Permit is required.

The DEQ-Tidewater Regional Office states that if during construction, transformers are to be disposed of, they should be characterized for polychlorinated biphenyl (PCBs) as governed by the Toxic Substance Control Act. For further information, contact the DEQ-Tidewater Regional Office at (757) 518-2000.

2. Chesapeake Bay Preservation Area. The Chesapeake Bay Local Assistance Department states that the proposed project is consistent with respect to the Chesapeake Bay Preservation Act as implemented in the City of Hampton.

3. Natural Heritage Resources. The Department of Conservation and Recreation (DCR) has searched its Biological and Conservation Data System (BCD) for occurrences of natural heritage resources from the areas outlined on the map in the EA. Natural heritage resources are defined as the habitat of rare, threatened, or endangered animal and plant species, unique or exemplary natural communities, and significant geologic communities. DCR indicates that natural heritage resources have been documented in the project area. However, due to the scope of the activity and the distance to the resources, DCR does not anticipate that the project will adversely impact these natural heritage resources. Also, pursuant to the Memorandum of Agreement established between DCR and the Department of Agriculture and Consumer Services (VDACS), DCR has the authority to report for VDACS on state-listed plant and insect species. The current activity will not affect any documented state-listed plant or insect species under the jurisdiction of VDACS. VDACS reviewed the document and states that no additional comments are necessary in reference to endangered plant and insect species regarding this project. Please contact DCR's Division of Natural Heritage at (804) 371-6206 for updated natural heritage resource information if a significant amount of time passes before the project is implemented.

4. Wildlife Resources. Under Title 29.1 of the Code of Virginia, the Department of Game and Inland Fisheries (DGIF) is the primary wildlife and freshwater fish management agency in the Commonwealth. DGIF has full law enforcement and regulatory jurisdiction over all wildlife resources, inclusive of state and federally endangered or threatened species, but excluding listed insects. The agency maintains a comprehensive system of databases of wildlife resources that is

available through the Agency's site at www.dgif.state.va.us, in the "Wildlife" section from the link to "Wildlife Information Online." DGIF determines likely impacts on fish and wildlife resources and habitats, and recommends appropriate measures to avoid, reduce or compensate for those impacts. For more information on the Wildlife Information Online Service, contact Kathy Quindlen at (804) 367-9717.

*5. **Erosion and Sediment Control and Stormwater Management.*** The EA (page 4-4) states that standard construction practices would be applied to control sedimentation and erosion during construction. Executive Order 12088-Federal Compliance with Pollution Control Standards and the Sikes Act authorizes cooperation between state and federal agencies regarding the conservation of natural resources. Compliance with the state Erosion and Sediment Control and Stormwater Management programs through proper design and implementation is consistent with the mandate of these federal directives. Notwithstanding cooperation with DCR, federal agencies are responsible for ensuring compliance with the state program on regulated activities under their authority through separate agreements with contractors, training, field inspection, enforcement action, or other means that are consistent with agency policy and federal and state mandates.

*6. **Air Quality.*** During construction, fugitive dust must be kept to a minimum by using applicable control methods outlined in 9 VAC 5-50-60 *et seq.* of the Regulations for the Control and Abatement of Air Pollution. These precautions include, but are not limited to, the following:

- Use, where possible, of water or chemicals for dust control;
- Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;
- Covering of open equipment for conveying materials; and
- Prompt removal of spilled or tracked dirt or other materials from paved streets and removal of dried sediments resulting from soil erosion.

This project is located in an ozone maintenance area. DEQ recommends that precautionary measures be employed to reduce ground-level ozone concentrations especially during ozone alert days. This can be done by minimizing the generation of ozone precursors such as volatile organic compounds and nitrogen oxides during operation of construction equipment and vehicles. Please contact the DEQ-Tidewater Regional Office, (757) 518-2000, for additional information.

*7. **Solid and Hazardous Wastes.*** The EA (page 4-5) states that it is possible that asbestos containing material (ACMs) and lead-based paint (LBP) may be present in portions of the building to be demolished. Prior to any demolition, the Air Force would identify all Category I and II non-friable ACM and LBP and would transport and dispose of these materials in accordance with applicable regulations. In addition, all wastes generated by construction and operation of the facilities would be managed in accordance with local, state and federal regulatory requirements. The Waste Division states that the EA addressed solid and hazardous waste issues and sites. The Waste Division, Central Office did a cursory review of its data files and states that Langley AFB is on the U.S. Environmental Protection Agency's Superfund

National Priorities List. Langley AFB is also listed as a large quantity generator of hazardous waste and disposes, stores and treats hazardous waste on-site. Any solid or hazardous wastes generated by this project should be reduced at the source, re-used, or recycled. Solid waste, hazardous waste, and hazardous materials must be managed in accordance with all applicable federal, state, and local environmental regulations.

8. Historic Resources. The Air Force provided information concerning Building 442 to the Department of Historic Resources (DHR). DHR agrees that the project is in keeping with the stipulations of the Memorandum of Agreement for the F-22 Beddown project. However, DHR recommends in their letter (March 24, 2003) to Suzanne Allan of Langley Air Force Base that the Air Force install wooden windows and a primary entrance door. These suggested changes are not a condition of the project, since DHR understands that cost may preclude the Air Force from making these changes. If you have further questions, contact Susan Smead of DHR at (804) 367-2323, ext. 110.

9. Wild and Scenic Rivers. The Department of Conservation and Recreation has indicated that the proposed project will not affect any streams on the National Park Service's Nationwide Inventory, Final List of Rivers, potential Scenic Rivers or existing or potential State Scenic Byways.

10. Local Issues. The Hampton Roads Planning District Commission (HRPDC) reviewed the EA and consistency determination and states that the proposed project appears consistent with local and regional plans and policies. The City of Hampton, in a letter to the HRPDC regarding this proposed project, recommends that the Air Force use the U.S. Green Building Council's Leadership in Energy and Environmental Design Green Building Design Rating System during the renovation process.

Regulatory and Coordination Needs

1. Water Quality. If land disturbance for the entire project equals one acre or more, a Virginia Pollutant Discharge Elimination System Stormwater General Permit for construction activities would be required. Prior to issuance of this permit, the Air Force must prepare an erosion and sedimentation control plan and a stormwater pollution prevention plan. For further information, contact the DEQ-Tidewater Regional Office at (757) 518-2000.

2. Air Quality Regulations. This project may be subject to regulation by the DEQ. The following sections of Virginia Administrative Code may be applicable: 9 VAC 5-50-60 *et seq.* governing fugitive dust emissions and 9 VAC 5-40-5600 *et seq.* addressing open burning. For additional information, please contact the DEQ-Tidewater Regional Office at (757) 518-2000.

3. Nonpoint Source Pollution Control. The Air Force must comply with the Virginia Erosion and Sediment Control Law and Regulations (VESCL&R), Virginia Storm Water Management Law and Regulations (VSWML&R), and other applicable federal non-point source pollution mandates (e.g. Clean Water Act-Section 313, Federal Consistency under the Coastal Zone Management Act). Accordingly, the Air Force should prepare and implement erosion and

sediment control (ESC) and storm water management (SWM) plans that comply with state law. The Air Force is ultimately responsible for achieving project compliance through oversight of on-site contractors, regular field inspection, prompt action against non-compliant sites, and/or other mechanisms consistent with agency policy. We encourage the Air Force to contact DCR's Chowan/Albermarle Watershed Office (telephone, (757) 925-2468) to obtain plan development or implementation assistance to ensure project compliance during and after demolition. *[Reference: VESCL §10.1-567; VSWML §10.1-603.15]*

4. Solid and Hazardous Waste. Any soil or sediment encountered during site activities that is suspected of contamination must be tested and disposed of in accordance with applicable federal, state and local laws and regulations. Should contamination be discovered, please contact the Tidewater Regional Office of the DEQ. Also, all solid waste, hazardous waste, and hazardous materials must be managed in accordance with all applicable federal, state, and local environmental regulations. The following state regulations may be applicable: Virginia Waste Management Act, Code of Virginia Sections 10.1-1400 *et seq.*; Virginia Hazardous Waste Management Regulations (9VAC 20-60); Virginia Solid Waste Management Regulations (9VAC 20-80) and Virginia Regulations for the Transportation of Hazardous Materials (9VAC 20-110). Some of the applicable Federal regulations are the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Section 6901 *et seq.* and the applicable regulations contained in Title 40 of the Code of Federal Regulations; and the U.S. Department of Transportation Rules for Transportation of Hazardous Materials, 49 CFR Parts 107, 171.1-172.558. Contact the DEQ-Tidewater Regional Office at (757) 518-2000 concerning the location and availability of suitable waste management facilities in the project area or if free product, discolored soils, or other evidence of contaminated soils are encountered.

If the structure to be demolished contains ACM and/or LBP, the following Federal and State regulations must be followed.

(a) Asbestos Removal and Disposal. Upon classification as friable or non-friable, all waste ACM should be disposed of in accordance with the Virginia Solid Waste Management Regulations (9 VAC 20-80-640), and transported in accordance with the Virginia regulations governing Transportation of Hazardous Materials (9 VAC 20-110-10 *et seq.*). For additional information, the Air Force should contact the Department of Labor and Industry at (757) 455-0891.

(b) Lead-based Paint Removal and Disposal. The proposed project should comply with the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) regulations, and with the Virginia Lead-Based Paint Activities Rules and Regulations (9VAC 20-60-261). For additional information, the Air Force may contact the Department of Professional and Occupational Regulation (Thomas Perry, telephone (804) 367-8595).

5. Federal Consistency. Pursuant to the Coastal Zone Management Act of 1972, as amended, federal activities with reasonable foreseeable effects on coastal uses and resources must be constructed and operated in a manner that is consistent, to the maximum extent practicable, with the VCP. Based on the information provided in the consistency determination that the applicant

would obtain and comply with all applicable permits and approvals listed under the enforceable policies of Virginia's Coastal Program and comments received from agencies administering the enforceable programs, we concur with the finding that this proposal is consistent with the VCP. However, other state approvals, which may apply to this project, are not included in this response. Therefore, the Air Force must ensure that this project is constructed in accordance with all applicable federal, state, and local laws and regulations.

Thank you for the opportunity to review the Environmental Assessment and Consistency Determination. Detailed comments of reviewing agencies are attached for your review. If you have any questions, please contact Anne Newsom at (804) 698-4135.

Sincerely,

Ellie Irons
Program Manager
Office of Environmental Impact Review

Enclosures

Cc: Martin Ferguson, WPS
Harold Winer, DEQ-TRO
Kotur Narasimhan, DEQ-Air
Tom Modena, DEQ
Derral Jones, DCR
Catherine Harold, CBLAD
Ethel Eaton, DHR
Arthur L. Collins, HRPDC

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

W. Tayloe Murphy, Jr.
Secretary of Natural Resources

Street address: 629 East Main Street, Richmond, Virginia 23219
Mailing address: P.O. Box 10009, Richmond, Virginia 23240
Fax (804) 698-4500 TDD (804) 698-4021
www.deq.state.va.us

Robert G. Burnley
Director

(804) 698-4000
1-800-592-5482

March 20, 2003

MEMORANDUM

TO: Anne Newsom, EIR Coordinator, Office of Environmental Impact Review

FROM: Martin Ferguson, Office of Water Permit Programs

SUBJECT: Environmental Assessment (EA) and Consistency Determination
Renovation of Building 442
DEQ-03-033F

We have reviewed the information provided concerning the above-referenced project. The project involves the renovation of Building 442 at Langley Air Force Base in the City of Hampton, Virginia. The following comments are provided by the Office of Water Permit Programs:

VWPP: No wetland or surface water impacts are proposed as part of the project. A VWP permit will not likely be required for site activities.

We encourage the use of erosion and sediment control measures, adherence to storm water management regulations, and careful construction practices to minimize temporary impacts to State waters during site construction activities.

VPDES: No VPDES permits appear to be necessary.

Newsom,Anne

From: Winer,Harold
Sent: Tuesday, March 18, 2003 10:39 AM
To: Newsom,Anne
Cc: Parolari,Bert; Cash-Robertson,William; McConathy,James; Johnston,Milton
Subject: EIR #03-033, Renovation of Bldg. 442

As requested, this office has reviewed the submitted information and has the following comments:

TOSCA regulations govern the disposal of transformers. If transformers are to be disposed, they should be characterized for PCBs.

Review of this Environmental Assessment indicates that renovation and construction will occur which may cause soil disturbance. If the disturbance amounts to an acre or more, a VPDES general permit for storm water runoff from construction activities will be required. Before the permit can be issued, Langley will need to prepare an erosion and sedimentation control plan and a storm water pollution prevention plan.

Review of this proposed activity finds no unresolved issues relative to the Virginia Water Protection Permit program provided that the Consistency Determination's representation that no nontidal wetland impacts will occur is accurate.

This office concurs with the "no significant impact" findings in this draft EA with respect to anticipated air quality impacts. In addition, it appears that the project is consistent with CZM requirements.

Thanks for the opportunity to comment.

Harold J. Winer
Deputy Regional Director
DEQ, Tidewater Regional Office
Phone - 757-518-2153 Fax - 757-518-2003
email - hjwiner@deq.state.va.us

W. Tayloe Murphy, Jr.
Secretary of Natural Resources

Joseph H. Maroon
Director

COMMONWEALTH of VIRGINIA

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MAR 2 4 2003
DEQ-Office of Environmental Impact Review

DEPARTMENT OF CONSERVATION AND RECREATION

203 Governor Street
Richmond, Virginia 23219-2010
TDD (804) 786-2121

MEMORANDUM

DATE: 19 March 2003

TO: Anne B. Newsom, Virginia Department of Environmental Quality

Derral Jones

FROM: Derral Jones, Planning Bureau Manager

SUBJECT: DEQ#03-033F: Renovation of Building 442, Department of Defense, U. S. Air Force, Hampton

The Department of Conservation and Recreation (DCR) has searched its Biological and Conservation Data System (BCD) for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

BCD documents the presence of natural heritage resources in the project vicinity. However, due to the scope of the activity and the distance to the resources, we do not anticipate that this project will adversely impact these natural heritage resources.

Under the Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the Department of Conservation and Recreation (DCR), DCR has the authority to report for VDACS on state-listed plant and insect species. The current activity will not affect any documented state-listed plants or insects.

Any absence of data may indicate that the project area has not been surveyed, rather than confirm that the project area lacks additional natural heritage resources. New and updated information is continually added to BCD. Please contact DCR for an update on this natural heritage information if a significant amount of time passes before it is utilized.

Please note that federal agencies and their authorized agents conducting regulated land disturbing activities on private and public lands in the state must comply with the Virginia Erosion and Sediment Control Law and Regulations (VESCL&R), Virginia Stormwater Management Law and Regulations (VSWML&R), and other applicable federal non-point source pollution mandates (e..g, Clean Water Act-Section 313, Federal Consistency under the Coastal Zone Management Act). Clearing and grading activities, installation of staging areas, parking lots, roads, buildings, utilities, or other structures, soil/dredge spoil areas, or related land conversion activities that disturb 2,500 square feet or more would be regulated by VESCL&R and those that disturb one acre or greater would be covered by VSWML&R. Accordingly, federal agencies should prepare and implement erosion and sediment control (ESC) and storm water management (SWM) plans to ensure compliance with state law. The federal agency is ultimately responsible for achieving project compliance through oversight of on site contractors, regular field inspection, prompt action against non-compliant sites, and/or other mechanisms consistent with agency policy. Federal agencies are highly encouraged to contact DCR's Chowan, Albermarle, & Coastal Watershed Office(1548-A Holland Road, Suffolk, Virginia, 23434, telephone 757

925-2468) to obtain plan development or implementation assistance to ensure project conformance during and after active construction. *[Reference: VESCL §10.1-567; VSWML §10.1-603.15]*

The proposed project is not anticipated to have any adverse impacts on existing or planned state recreational facilities. Nor will it impact on any streams on the National Park Service Nationwide Inventory, Final List of Rivers, potential Scenic Rivers or existing or potential State Scenic Byways.

Thank you for the opportunity to offer comments on this project.

RECEIVED

MAR 1 9 2003

DEQ-Office of Environmental Impact Review

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

W. Tayloe Murphy, Jr.
Secretary of Natural Resources

Street address: 629 East Main Street, Richmond, Virginia 23219
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www.deq.state.va.us

Robert G. Burnley
Director

(804) 698-4000
1-800-592-5482

MEMORANDUM

TO: Anne Newsom

FROM: Thomas Modena TDM

DATE: March 19, 2003

COPIES: Kevin Greene

SUBJECT: Environmental Assessment
Langley Air Force Base Renovation of Building 442

The Waste Division has reviewed the Environmental Assessment for the Langley Air Force Base Renovation of Building 442, Hampton. We have the following comments concerning the waste issues associated with this project.

The report addressed solid and hazardous waste issues and sites. The central office of the Waste Division did a cursory review of its data files and confirmed that this facility is on the U. S. Environmental Protection Agency's Superfund National Priorities List. Also, the facility is a large quantity generator of hazardous waste, and has land disposal, storage and treatment of hazardous waste on the site. These activities were adequately addressed in the report.

The Virginia Department of Environmental Quality Federal Facilities Program also reviewed this report and had the following comments.

The preferred alternative, renovation of Building 442, does not involve any of the active or closed Environmental Restoration Program sites on Langley AFB. Please note that the preferred alternative does mention removing a transformer unit at the rear of Building 442. The Base Remedial Program Manager, Mr. Richard Jubie (757-764-1082), should be advised when this transformer is removed as there may be environmental contamination beneath and around this transformer. Any contamination revealed during the removal process may require further investigation resulting in delays to the renovation process.

Any soil that is suspected of contamination or wastes that are generated must be tested and disposed of in accordance with applicable Federal, State, and local laws and regulations. Some of the applicable state laws and regulations are: Virginia Waste Management Act, Code of Virginia Section 10.1-1400 *et seq.*; Virginia Hazardous Waste Management Regulations (VHWMR) (9VAC 20-60); Virginia Solid Waste Management Regulations (VSWMR) (9VAC 20-80); Virginia Regulations for the Transportation of Hazardous Materials (9VAC 20-110). Some of the applicable Federal laws and regulations are: the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Section 6901 *et seq.*, and the applicable regulations contained in Title 40 of the Code of Federal Regulations; and the U.S. Department of Transportation Rules for Transportation of Hazardous Materials, 49 CFR Parts 107, 171.1-172.558.

The report states that the structures to be demolished/renovated will be checked for the presence of asbestos-containing materials (ACM) and lead-based paint (LBP). If LBP or ACM are found, in addition to the Federal waste-related regulations, State regulations 9VAC 20-80-640 for ACM and 9VAC 20-60-261 for LBP must be followed.

Finally, the report addressed pollution prevention. VDEQ encourages all construction projects and facilities to implement pollution prevention principles, including the reduction, reuse, and recycling of all solid wastes generated.

If you have any questions or need further information, please let me know.

If you cannot meet the deadline, please notify ANNE B.NEWSOM at 804/698-4135 prior to the date given. Arrangements will be made to extend the date for your review if possible. An agency will not be considered to have reviewed a document if no comments are received (or contact is made) within the period specified.

REVIEW INSTRUCTIONS:

A. Please review the document carefully. If the proposal has been reviewed earlier (i.e. if the document is a federal Final EIS or a state supplement), please consider whether your earlier comments have been adequately addressed.

B. Prepare your agency's comments in a form which would be acceptable for responding directly to a project proponent agency.

C. Use your agency stationery or the space below for your comments. **IF YOU USE THE SPACE BELOW, THE FORM MUST BE SIGNED AND DATED.**

Please return your comments to:

MS. ANNE B. NEWSOM
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL IMPACT REVIEW
629 EAST MAIN STREET, SIXTH FLOOR
RICHMOND, VA 23219
FAX #804/698-4319

ANNE B. NEWSOM
ENVIRONMENTAL PROGRAM PLANNER

COMMENTS

No comments

(signed) Alan D. Weber (date) 3-10-03

(title) _____

(agency) VDH

COMMONWEALTH of VIRGINIA

W. Tayloe Murphy, Jr.
Secretary of Natural Resources

CHESAPEAKE BAY LOCAL ASSISTANCE DEPARTMENT
James Monroe Building
101 North 14th Street, 17th Floor Richmond, Virginia 23219
FAX (804) 225-3447 TDD/Voice 1-800-243-7229
www.cblad.state.va.us

C. Scott Crafton
Acting Executive Director
(804) 225-3440

March 18, 2003

Ms. Anne B. Newsom
Department of Environmental Quality
Office of Environmental Impact Review
629 East Main Street, Sixth Floor
Richmond, Virginia 23219

RE: Renovation of Building #442, Langley AFB
DEQ Federal Project #: 03-033F
CBLAD Review No. FSPR-USAF-01-03

Dear Ms. Newsom:

As you requested, we have completed our review of the above-referenced Environmental Assessment for consistency with the provisions of the Chesapeake Bay Preservation Act (CBPA), as implemented by the City of Hampton. The proposal is consistent with respect to the CBPA.

We appreciate the opportunity to provide our comments and recommendations in this matter. Please do not hesitate to contact us at 1-900-CHESBAY, should you have any questions or comments.

Sincerely,

David J. Kovacs, Regulatory and Policy Planner

Doug Wetmore, Principal Planner

If you cannot meet the deadline, please notify ANNE B.NEWSOM at 804/698-4135 prior to the date given. Arrangements will be made to extend the date for your review if possible. An agency will not be considered to have reviewed a document if no comments are received (or contact is made) within the period specified.

REVIEW INSTRUCTIONS:

A. Please review the document carefully. If the proposal has been reviewed earlier (i.e. if the document is a federal Final EIS or a state supplement), please consider whether your earlier comments have been adequately addressed.

B. Prepare your agency's comments in a form which would be acceptable for responding directly to a project proponent agency.

C. Use your agency stationery or the space below for your comments. **IF YOU USE THE SPACE BELOW, THE FORM MUST BE SIGNED AND DATED.**

Please return your comments to:

MS. ANNE B. NEWSOM
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL IMPACT REVIEW
629 EAST MAIN STREET, SIXTH FLOOR
RICHMOND, VA 23219
FAX #804/698-4319

ANNE B. NEWSOM
ENVIRONMENTAL PROGRAM PLANNER

COMMENTS

Please see letter, following.

(signed) Lisa D. Mead (date) 3/24/03

(title) Architectural Historian

(agency) VDHR (proj. no. 1998-0898)

PROJECT #03-033F 8/98

COMMONWEALTH of VIRGINIA

Department of Historic Resources

W. Tayloe Murphy, Jr.
Secretary of Natural Resources

2801 Kensington Avenue, Richmond, Virginia 23221

Kathleen S. Kilpatrick
Director

Tel: (804) 367-2323
Fax: (804) 367-2391
TDD: (804) 367-2386
www.dhr.state.va.us

24 March 2003

Suzanne P. Allan, AICP
Chief, Planning and Programming
1st Civil Engineer Squadron
37 Sweeney Blvd.
Langley Air Force Base, VA 23665

Re: Facility 442 Rehabilitation
Langley Air Force Base
Hampton, VA
VDHR project no. 1998-0898

Dear Suzanne,

Thank you for providing information to the Department of Historic Resources (DHR) for review and comment concerning the proposed rehabilitation of Facility 442. As noted in your letter this building contributes to the Langley Field Historic District, eligible for listing in the National Register of Historic Places. I apologize for the lateness of this response and understand that work on the project may have progressed.

DHR concurs with the finding of the US Air Force that the proposed undertaking will have no adverse effect on historic properties. Also, DHR agrees that the project is in keeping with stipulations of the Memorandum of Agreement for the F-22 Beddown project. The Air Force is to be congratulated for finding a compatible new use for Facility 442, and returning compromised features of the building to their historic appearance with reference to the mid-twentieth century photograph of the building.

Based on comparison of the project plans and the photo depicting the building's historic appearance, the following suggestion is offered: Rather than installing aluminum storefront windows and entrance door in the façade (with windows also to be placed in the bays that historically were fitted with overhead service station doors), DHR suggests using wooden windows and a primary entrance door like those shown in the photo. If this can be done, the wooden windows should have true divided light muntins with dimensions and profile coming as close as possible to the historic windows and to those in the overhead doors, and a primary entrance door with stylistically compatible appearance and a transom panel like the historic entrance. This proposed change to the project is not a condition since it is understood that cost may preclude it.

Thank you again for consulting with the Department on this undertaking. Please call me at (804) 367-2323, extension 110, or contact me by e-mail at SSmead@dhr.state.va.us, if you have questions.

Sincerely,

Susan E. Smead
Architectural Historian/Historian and Preservationist III

Administrative Svcs.
10 Courthouse Avenue
Petersburg, VA 23803
Tel: (804) 863-1636
Fax: (804) 862-6196

Petersburg Office
19-B Bollingbrook Street
Petersburg, VA 23803
Tel: (804) 863-1620
Fax: (804) 863-1627

Portsmouth Office
813 Court Street, 3rd Floor
Portsmouth, VA 23704
Tel: (757) 396-8709
Fax: (757) 396-8712

Roanoke Office
1030 Penmar Avenue, SE
Roanoke, VA 24013
Tel: (540) 857-7585
Fax: (540) 857-7588

Winchester Office
107 N. Kent Street, Suite 203
Winchester, VA 22601
Tel: (540) 722-3427
Fax: (540) 722-7536

If you cannot meet the deadline, please notify ANNE B.NEWSOM at 804/698-4135 prior to the date given. Arrangements will be made to extend the date for your review if possible. An agency will not be considered to have reviewed a document if no comments are received (or contact is made) within the period specified.

REVIEW INSTRUCTIONS:

A. Please review the document carefully. If the proposal has been reviewed earlier (i.e. if the document is a federal Final EIS or a state supplement), please consider whether your earlier comments have been adequately addressed.

B. Prepare your agency's comments in a form which would be acceptable for responding directly to a project proponent agency.

C. Use your agency stationery or the space below for your comments. **IF YOU USE THE SPACE BELOW, THE FORM MUST BE SIGNED AND DATED.**

Please return your comments to:

MS. ANNE B. NEWSOM
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL IMPACT REVIEW
629 EAST MAIN STREET, SIXTH FLOOR
RICHMOND, VA 23219
FAX #804/698-4319

ANNE B. NEWSOM
ENVIRONMENTAL PROGRAM PLANNER

COMMENTS

Statements in the project document concerning endangered species were reviewed and compared to available information. No additional comments are necessary in reference to endangered plant and insect species regarding this project.

(signed) _____ (Keith R. Tignor) (date) March 21, 2003

(title) Endangered Species Coordinator

(agency) VDACS, Office of Plant and Pest Service

PROJECT #03-033F 8/98

HAMPTON ROADS
PLANNING DISTRICT COMMISSION

LOUIS R. JONES, CHAIRMAN • JEANNE ZEIDLER, VICE-CHAIR • JAMES O. MCREYNOLDS, TREASURER
ARTHUR L. COLLINS, EXECUTIVE DIRECTOR/SECRETARY

March 21, 2003

Ms. Anne B. Newsom
Department of Environmental Quality
Office of Environmental Impact Review
629 East Main Street, Sixth Floor
Richmond, Virginia 23219

Re: Renovation of Building 442,
Langley Air Force Base
DEQ# 03-033F (ENV:GEN)

Dear Ms. Newsom:

Pursuant to your request of March 3, 2003, the staff of the Hampton Roads Planning District Commission has reviewed the Draft Environmental Assessment for Renovation of Building 442, United States Air Force, First Fighter Wing. We have contacted the City of Hampton concerning the project.

Based on this review, the proposed project is consistent with local and regional plans and policies. Attached is a copy of the letter we received from the City of Hampton indicating that it identified no issues of concern with the project. The City recommends that the United States Green Building Council's Leadership in Energy and Environmental Design (LEED) Green Building Design Rating System be utilized in the renovation process.

We appreciate the opportunity to review this project. If you have any questions, please do not hesitate to call.

Sincerely,

Arthur L. Collins
Executive Director/Secretary

ALS:fh

Attachment

Copy: Mr. Donald Whipple, HA

APPENDIX B
MEMORANDUM OF AGREEMENT

MEMORANDUM OF AGREEMENT
BETWEEN
LANGLEY AIR FORCE BASE (AFB)
AND
THE VIRGINIA STATE HISTORIC PRESERVATION OFFICE (SHPO)
REGARDING DEMOLITION OF FACILITIES 754, 755, AND 756

WHEREAS, Langley AFB, Hampton, Virginia, is a potential location for the beddown of three operational squadrons of the F-22 fighter aircraft, and

WHEREAS, a beddown of F-22 aircraft at Langley AFB would involve the demolition of Facilities 754, 755 and 756 and construction of new structures to replace them, and

WHEREAS, Langley AFB has determined, and the SHPO concurred, that said demolition and new construction would have an adverse effect on the Langley Field Historic District, a property eligible for listing on the National Register of Historic Places, and

WHEREAS, Langley AFB has consulted with the Virginia Department of Historic Resources, hereinafter referred to as the Virginia State Historic Preservation Officer, or SHPO, pursuant to Section 800.3 of the regulations (36 CFR 800) implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f) and will continue said consultation for the duration of the undertaking, and,

WHEREAS, views from local government and interested parties have been solicited and considered, per 36 CFR 800.6(a)(4), and

NOW, THEREFORE, Langley AFB and the Virginia SHPO agree that the proposed undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

Stipulations

Langley AFB shall ensure that the following measures are carried out in consultation with the SHPO:

1. Recordation

   a. Langley AFB shall record Facilities 754, 755 and 756 as follows prior to demolition:
   - Site plan drawing of the site.
   - 5" x 7" medium format black and white photos of the interior and exterior, printed on black and white photographic paper, and showing overall views to include all exterior elevations, interior spaces, and detail views of significant interior and exterior features.

- Concise description and statement of significance for each of the buildings.
- Completion of the SHPO's Intensive Level Survey Field Form, to include floor plan drawings.

b. Langley AFB shall provide these draft documents to the SHPO for review and approval prior to any demolition.

c. Langley AFB shall provide one set of final original recordation materials for these buildings to the SHPO for permanent curation and one copy to the Office of the Command Historian, HQ Air Combat Command. Langley AFB shall further pursue other repository options for the purpose of making said documentation more readily accessible to the public.

2. Salvage

Langley AFB shall survey the three buildings to be demolished for character-defining architectural elements. Those that lend themselves to salvage will either be reused in a replacement building or curated. The selection of these elements and development of plans for their reuse shall be done in consultation with the SHPO.

3. Mitigation

a. Within 18 months of the execution of this MOA, as indicated by its latest signature date, Langley AFB shall prepare a National Register of Historic Places nomination form for the Langley Field Historic District in accordance with Air Force policy and 36 CFR 60.9 and submit it to the Keeper of the National Register in coordination with the SHPO.

b. Langley AFB shall rehabilitate the National Register-eligible Facility 442, a World War II period service station. The rehabilitated building will be adaptively reused for a Wing Administrative function. Development and completion of the plans for rehabilitation, including work on the building and the site immediately surrounding the building, will be coordinated with the SHPO as a separate undertaking.

c. Langley AFB shall develop a historic resources training video for installation personnel. The video will provide general information regarding the significance of historic properties on Langley AFB, and more specifically, the Langley Field Historic District, their care, and an overview of government responsibilities related to stewardship and compliance with Federal law.

d. Langley AFB shall develop photographic displays for each of the new hangars to depict and convey the historic nature of the buildings that preceded them on the same site.

4. Continued Consultation on Design for New F-22 Beddown Buildings in the Langley Field Historic District

a. Langley AFB shall continue to consult with the SHPO concerning the designs for the new F-22 Beddown structures and site work around the structures intended to replace Facilities 754, 755 and 756.

b. Langley AFB shall consider the recommended approaches in *The Secretary of the Interior's Standards* for the designs for new buildings and structures in the Langley Field Historic District.

c. The SHPO shall provide review and approval for the designs for new F-22 Beddown buildings and structures in the Langley Field Historic District. If no response is received by Langley AFB from the SHPO within 30 days of receipt by the SHPO of complete information about a design proposal, or a component of a design for a new building or structure in the Langley Field Historic District, Langley AFB may assume that the SHPO approves the design.

Other Terms and Conditions

If Langley AFB discovers historic properties or archaeological sites without prior planning or unanticipated effects on historic properties or archaeological sites are found after Langley AFB has completed the Section 106 process, Langley AFB will make reasonable efforts to avoid, minimize or mitigate adverse effects to such properties or sites pursuant to 36 CFR 800.13(b). If no construction has commenced, Langley AFB will consult with the SHPO within 48 hours of discovery. The notification shall describe the actions proposed by Langley AFB to resolve the adverse effects. The SHPO shall respond within 48 hours of the notification and Langley AFB shall take into account his/her recommendations and carry out appropriate actions. Langley AFB will provide the SHPO a report of the actions when they are completed pursuant to 36 CFR 800.13(b)3.

Should the SHPO object to any studies, plans, drawings, or other documentation submitted pursuant to this Agreement, said objections shall be made in writing to Langley AFB within 30 days of their receipt. Langley AFB shall then consult with the objecting party to resolve the objection. If Langley AFB determines that the objection cannot be resolved, Langley AFB will request the comment of the ACHP pursuant to 36 CFR Part 800.6(b).

This agreement shall be null and void if its terms are not carried out within five (5) years from the date of its execution, unless the signatories agree in writing to an extension for carrying out its terms.

Execution of this Memorandum of Agreement by Langley AFB and the SHPO and implementation of its terms evidence that Langley AFB has afforded the Advisory Council on Historic Preservation an opportunity to comment on the demolition of Facilities 754, 755 and 756 and the undertaking's effects on historic properties, and that Langley AFB has taken into account the effects of the undertaking on historic properties.

LANGLEY AIR FORCE BASE

By: _____ Date: _____
KEITH R. BELL, Colonel, USAF
Commander, 1st Support Group

By: _____ Date: _____
STEPHEN GOLDFEIN, Colonel, USAF
Commander, 1st Fighter Wing

VIRGINIA DEPARTMENT OF HISTORIC RESOURCES

By: _____ Date: _____
KATHLEEN S. KILPATRICK
Director and State Historic Preservation Officer

AMENDMENT
TO THE MEMORANDUM OF AGREEMENT
BETWEEN
LANGLEY AIR FORCE BASE (AFB)
AND
THE VIRGINIA STATE HISTORIC PRESERVATION OFFICE (SHPO)
REGARDING DEMOLITION OF FACILITIES 754, 755, AND 756
EXECUTED SEPTEMBER 28, 2001

WHEREAS, a Memorandum of Agreement (MOA) between Langley AFB and the SHPO regarding demolition of Facilities 75, 755, and 756 was executed on September 28, 2001; and

WHEREAS, the purpose of the MOA is to satisfy Langley AFB's responsibilities for consultation pursuant to Section 800.3 of the regulations (36 CFR 800) implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f) and will continue said consultation for the duration of the undertaking; and

WHEREAS, the SHPO has asked Langley AFB to address the issue of procedures in the event of an unexpected discovery, and

NOW, THEREFORE, Langley AFB and the SHPO agree to amend the MOA by adding the following:

Other Terms and Conditions

Langley AFB shall ensure that construction documents contain the following provisions for the treatment of unexpected discoveries:

1. In the event that a previously unidentified historic property is discovered in the area of potential effect after implementation of this MOA or initiation of ground disturbing activities, all construction work involving subsurface disturbance will be halted in the area of the resource and in the surrounding area where further subsurface remains can reasonably be expected to occur. The Contractor shall immediately notify the U.S. Army Corps of Engineers Contracting Officer who shall immediately notify the Langley AFB Project Manager and Langley AFB Cultural Resources Manager. The Langley AFB Cultural Resources Manager shall then immediately notify the SHPO. The Langley AFB Project Manager, Langley AFB Cultural Resources Manager, and the SHPO or an archeologist meeting the Secretary of Interior's Qualifications Standards, will inspect the work site and determine the nature and area of the affected archeological resource and assess whether further investigations are warranted. Work may then continue in the project area outside the site area.

2. Langley AFB will consult with the SHPO to determine the National Register eligibility of the previously unidentified resource. The SHPO will respond within two

business days of receipt of the documentation. The documentation may be submitted electronically. Potentially eligible historic properties will be evaluated using the National Register criteria in accordance with 36 CFR 800.4(c). If Langley AFB determines that the resource meets the National Register Criteria (36 CFR Part 60.6), Langley AFB shall ensure compliance with Section 800.13 of the Council's Regulations. The SHPO shall provide comments on any treatment plan submitted within two business days of receipt. If the SHPO fails to comment, Langley AFB may assume concurrence and implement the plan. Work in the affected area shall not proceed until either the development and implementation of an appropriate treatment plan occurs; or the determination is made that the located resource is not eligible for inclusion on the National Register.

LANGLEY AIR FORCE BASE

By: _____ Date: _____
KEITH R. BELL, Colonel, USAF
Commander, 1st Support Group

By: _____ Date: _____
STEPHEN M. GOLDFEIN, Colonel, USAF
Commander, 1st Fighter Wing

VIRGINIA DEPARTMENT OF HISTORIC RESOURCES

By: _____ Date: _____
KATHLEEN S. KILPATRICK
Director and State Historic Preservation Officer